. // Model SP.C.PP.4

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

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

note: sp48\_4\_pp\_c\_lag\_all omitted because of collinearity

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

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

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

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

Iteration 0: log pseudolikelihood = -8947.7127

Iteration 1: log pseudolikelihood = -8370.2974

Iteration 2: log pseudolikelihood = -8364.5871

Iteration 3: log pseudolikelihood = -8364.5796

Iteration 4: log pseudolikelihood = -8364.5796

Generalized linear models No. of obs = 6,253

Optimization : ML Residual df = 5,940

Scale parameter = 1

Deviance = 7154.293504 (1/df) Deviance = 1.204427

Pearson = 7917.374886 (1/df) Pearson = 1.332891

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

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

AIC = 2.775493

Log pseudolikelihood = -8364.579599 BIC = -44766.16

(Std. Err. adjusted for 1,238 clusters in mineid)

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| Robust

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

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

sp47\_41\_pp\_c\_lag\_all | 1.000244 .0001427 1.71 0.087 .9999648 1.000524

sp47\_42\_pp\_c\_lag\_all | .9994125 .000688 -0.85 0.393 .998065 1.000762

sp47\_44\_pp\_c\_lag\_all | .9998135 .0002417 -0.77 0.440 .9993398 1.000287

sp48\_11\_pp\_c\_lag\_all | .9998764 .0001417 -0.87 0.383 .9995988 1.000154

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

sp48\_25\_pp\_c\_lag\_all | .999763 .0002368 -1.00 0.317 .9992991 1.000227

sp48\_26\_pp\_c\_lag\_all | 1.000502 .0003761 1.34 0.182 .9997655 1.00124

sp48\_27\_pp\_c\_lag\_all | 1.000349 .0002188 1.60 0.111 .9999203 1.000778

sp48\_28\_pp\_c\_lag\_all | .9989857 .0003271 -3.10 0.002 .9983449 .999627

sp48\_4\_pp\_c\_lag\_all | 1 (omitted)

sp48\_5\_pp\_c\_lag\_all | 1.000172 .000397 0.43 0.666 .9993938 1.00095

sp48\_6\_pp\_c\_lag\_all | 1.000204 .0001246 1.63 0.102 .9999594 1.000448

sp48\_7\_pp\_c\_lag\_all | 1.000438 .0001454 3.01 0.003 1.000153 1.000723

sp48\_8\_pp\_c\_lag\_all | .9999996 .000239 -0.00 0.999 .9995314 1.000468

sp71\_701\_pp\_c\_lag\_all | .9990811 .0013684 -0.67 0.502 .9964027 1.001767

sp72\_503\_pp\_c\_lag\_all | .9998947 .0002289 -0.46 0.646 .9994461 1.000343

sp72\_610\_pp\_c\_lag\_all | .997544 .0019155 -1.28 0.200 .9937966 1.001305

sp72\_620\_pp\_c\_lag\_all | 1.001663 .0010226 1.63 0.104 .9996603 1.003669

sp72\_630\_pp\_c\_lag\_all | 1.000005 .0000228 0.24 0.810 .9999608 1.00005

sp75\_100\_pp\_c\_lag\_all | 1.000186 .0005581 0.33 0.739 .9990926 1.00128

sp75\_1001\_1\_pp\_c\_lag\_all | .9994106 .0010048 -0.59 0.558 .9974432 1.001382

sp75\_1001\_pp\_c\_lag\_all | 1.001287 .0009273 1.39 0.165 .9994709 1.003106

sp75\_1003\_1\_pp\_c\_lag\_all | .9995849 .0005909 -0.70 0.483 .9984274 1.000744

sp75\_1100\_2\_pp\_c\_lag\_all | 1.000025 .0000189 1.32 0.186 .999988 1.000062

sp75\_1101\_20\_pp\_c\_lag\_all | 1.00009 .0003996 0.22 0.823 .9993065 1.000873

sp75\_1102\_pp\_c\_lag\_all | .9998781 .0002256 -0.54 0.589 .9994361 1.00032

sp75\_1103\_4\_pp\_c\_lag\_all | 1.000015 .0000365 0.41 0.679 .9999436 1.000087

sp75\_1104\_pp\_c\_lag\_all | .9998637 .0001032 -1.32 0.187 .9996614 1.000066

sp75\_1106\_2\_pp\_c\_lag\_all | 1.000076 .0001119 0.68 0.498 .9998566 1.000295

sp75\_1106\_3\_pp\_c\_lag\_all | 1.00004 .0000375 1.06 0.288 .9999663 1.000113

sp75\_1106\_4\_pp\_c\_lag\_all | 1.000002 .0003434 0.01 0.996 .9993291 1.000675

sp75\_1106\_5\_pp\_c\_lag\_all | .9996711 .0001329 -2.47 0.013 .9994106 .9999316

sp75\_1106\_6\_pp\_c\_lag\_all | 1.001465 .0021922 0.67 0.504 .9971776 1.005771

sp75\_1106\_pp\_c\_lag\_all | 1.000305 .0003052 1.00 0.317 .9997072 1.000903

sp75\_1107\_14\_pp\_c\_lag\_all | 1.002924 .0011796 2.48 0.013 1.000615 1.005239

sp75\_1400\_1\_pp\_c\_lag\_all | .9994745 .0005835 -0.90 0.368 .9983316 1.000619

sp75\_1400\_2\_pp\_c\_lag\_all | .9979675 .0010089 -2.01 0.044 .995992 .999947

sp75\_1400\_3\_pp\_c\_lag\_all | .9998016 .0001803 -1.10 0.271 .9994483 1.000155

sp75\_1400\_4\_pp\_c\_lag\_all | .9999092 .0003731 -0.24 0.808 .9991782 1.000641

sp75\_1400\_pp\_c\_lag\_all | 1.000478 .0001668 2.87 0.004 1.000151 1.000805

sp75\_1401\_1\_pp\_c\_lag\_all | .9983819 .0025958 -0.62 0.533 .9933073 1.003483

sp75\_1401\_pp\_c\_lag\_all | .9999678 .0009208 -0.03 0.972 .9981647 1.001774

sp75\_1403\_10\_pp\_c\_lag\_all | 1.000093 .0000438 2.12 0.034 1.000007 1.000179

sp75\_1403\_11\_pp\_c\_lag\_all | .9987267 .0007029 -1.81 0.070 .99735 1.000105

sp75\_1403\_3\_pp\_c\_lag\_all | .9976015 .001226 -1.95 0.051 .9952015 1.000007

sp75\_1403\_4\_pp\_c\_lag\_all | 1.003369 .0016943 1.99 0.046 1.000054 1.006695

sp75\_1403\_5\_pp\_c\_lag\_all | .9999788 .0000202 -1.05 0.293 .9999392 1.000018

sp75\_1403\_6\_pp\_c\_lag\_all | .9999907 .0000209 -0.45 0.656 .9999498 1.000032

sp75\_1403\_7\_pp\_c\_lag\_all | .9999853 .0001153 -0.13 0.898 .9997594 1.000211

sp75\_1403\_8\_pp\_c\_lag\_all | 1.000017 .0000235 0.71 0.476 .9999707 1.000063

sp75\_1403\_9\_pp\_c\_lag\_all | 1.000335 .0001707 1.96 0.050 1 1.00067

sp75\_1404\_1\_pp\_c\_lag\_all | .9966454 .0009537 -3.51 0.000 .9947779 .9985165

sp75\_1404\_pp\_c\_lag\_all | .9991689 .000854 -0.97 0.331 .9974965 1.000844

sp75\_1405\_1\_pp\_c\_lag\_all | .9992773 .0009232 -0.78 0.434 .9974694 1.001088

sp75\_1405\_pp\_c\_lag\_all | .9999576 .0000543 -0.78 0.435 .9998512 1.000064

sp75\_1431\_pp\_c\_lag\_all | .9991885 .0027709 -0.29 0.770 .9937724 1.004634

sp75\_1432\_pp\_c\_lag\_all | 1.000282 .0004699 0.60 0.549 .9993609 1.001203

sp75\_1433\_pp\_c\_lag\_all | .9997818 .0003091 -0.71 0.480 .9991763 1.000388

sp75\_1434\_pp\_c\_lag\_all | .9997827 .000266 -0.82 0.414 .9992615 1.000304

sp75\_1435\_pp\_c\_lag\_all | .998225 .001349 -1.31 0.189 .9955846 1.000872

sp75\_1437\_pp\_c\_lag\_all | .999471 .0008562 -0.62 0.537 .9977942 1.001151

sp75\_150\_pp\_c\_lag\_all | .9996845 .0005232 -0.60 0.547 .9986596 1.00071

sp75\_151\_pp\_c\_lag\_all | 1.000685 .0008872 0.77 0.440 .9989477 1.002425

sp75\_153\_pp\_c\_lag\_all | 1.003235 .000785 4.13 0.000 1.001698 1.004775

sp75\_156\_pp\_c\_lag\_all | .9994569 .0008323 -0.65 0.514 .997827 1.001089

sp75\_160\_pp\_c\_lag\_all | .999203 .0019457 -0.41 0.682 .9953968 1.003024

sp75\_1600\_2\_pp\_c\_lag\_all | .9999982 .0000597 -0.03 0.977 .9998812 1.000115

sp75\_1712\_10\_pp\_c\_lag\_all | .99941 .0002138 -2.76 0.006 .9989911 .9998291

sp75\_1712\_6\_pp\_c\_lag\_all | 1.00022 .0001622 1.36 0.174 .9999026 1.000538

sp75\_1720\_pp\_c\_lag\_all | .9998918 .0001189 -0.91 0.363 .9996588 1.000125

sp75\_1721\_pp\_c\_lag\_all | .9976954 .0005734 -4.01 0.000 .9965723 .9988199

sp75\_1725\_pp\_c\_lag\_all | 1.00001 7.17e-06 1.43 0.152 .9999962 1.000024

sp75\_1726\_pp\_c\_lag\_all | 1.000534 .000269 1.98 0.047 1.000007 1.001061

sp75\_1727\_pp\_c\_lag\_all | 1.00114 .0007501 1.52 0.128 .9996708 1.002611

sp75\_1728\_pp\_c\_lag\_all | 1.000038 .0008788 0.04 0.966 .9983166 1.001762

sp75\_1729\_pp\_c\_lag\_all | .9987586 .0004813 -2.58 0.010 .9978157 .9997023

sp75\_1730\_pp\_c\_lag\_all | 1.000306 .000354 0.86 0.388 .9996121 1.001

sp75\_1731\_pp\_c\_lag\_all | 1.000012 5.53e-06 2.17 0.030 1.000001 1.000023

sp75\_1903\_pp\_c\_lag\_all | 1.000313 .0001142 2.74 0.006 1.000089 1.000537

sp75\_1909\_pp\_c\_lag\_all | .9999834 .0000156 -1.06 0.288 .9999528 1.000014

sp75\_1910\_pp\_c\_lag\_all | 1.000052 .000028 1.84 0.066 .9999967 1.000107

sp75\_1911\_pp\_c\_lag\_all | .9999609 .0000379 -1.03 0.303 .9998866 1.000035

sp75\_1912\_pp\_c\_lag\_all | 1.000374 .0002871 1.30 0.193 .9998111 1.000936

sp75\_1913\_pp\_c\_lag\_all | 1.000581 .0003251 1.79 0.074 .9999438 1.001218

sp75\_1914\_pp\_c\_lag\_all | .9999732 .0000185 -1.45 0.148 .9999369 1.000009

sp75\_1915\_pp\_c\_lag\_all | 1.000245 .0002863 0.85 0.393 .9996838 1.000806

sp75\_202\_pp\_c\_lag\_all | .999997 3.37e-06 -0.90 0.369 .9999904 1.000004

sp75\_208\_pp\_c\_lag\_all | 1.000033 .0000437 0.77 0.443 .9999479 1.000119

sp75\_211\_pp\_c\_lag\_all | 1.000031 .0000488 0.63 0.530 .999935 1.000126

sp75\_212\_pp\_c\_lag\_all | 1.000153 .0000949 1.62 0.106 .9999674 1.00034

sp75\_214\_pp\_c\_lag\_all | .9999332 .0001102 -0.61 0.545 .9997172 1.000149

sp75\_312\_pp\_c\_lag\_all | 1.000058 .0000807 0.72 0.472 .9998998 1.000216

sp75\_320\_pp\_c\_lag\_all | .9999017 .0000528 -1.86 0.062 .9997982 1.000005

sp75\_324\_pp\_c\_lag\_all | .9994577 .0002259 -2.40 0.016 .9990151 .9999005

sp75\_337\_pp\_c\_lag\_all | 1.000111 .0000999 1.11 0.266 .9999153 1.000307

sp75\_340\_pp\_c\_lag\_all | .9999594 .0000289 -1.40 0.161 .9999027 1.000016

sp75\_341\_pp\_c\_lag\_all | .9978729 .0018033 -1.18 0.239 .9943447 1.001414

sp75\_342\_pp\_c\_lag\_all | 1.000002 .0000151 0.11 0.916 .999972 1.000031

sp75\_344\_pp\_c\_lag\_all | 1.000152 .0002371 0.64 0.522 .9996871 1.000617

sp75\_352\_pp\_c\_lag\_all | 1.000267 .0001814 1.47 0.141 .9999114 1.000622

sp75\_382\_pp\_c\_lag\_all | .9999939 .0001749 -0.03 0.972 .9996511 1.000337

sp75\_503\_pp\_c\_lag\_all | .9999965 6.59e-06 -0.53 0.599 .9999836 1.000009

sp75\_504\_pp\_c\_lag\_all | 1.000777 .0003963 1.96 0.050 1.000001 1.001554

sp75\_505\_pp\_c\_lag\_all | 1.000919 .0004692 1.96 0.050 .9999993 1.001839

sp75\_506\_1\_pp\_c\_lag\_all | 1.001194 .0002994 3.99 0.000 1.000608 1.001781

sp75\_506\_pp\_c\_lag\_all | .9994118 .0002659 -2.21 0.027 .9988909 .999933

sp75\_507\_pp\_c\_lag\_all | .9999145 .0001174 -0.73 0.467 .9996844 1.000145

sp75\_511\_1\_pp\_c\_lag\_all | 1.000851 .0021867 0.39 0.697 .9965743 1.005146

sp75\_511\_pp\_c\_lag\_all | 1.00002 .0001716 0.12 0.906 .9996841 1.000357

sp75\_512\_1\_pp\_c\_lag\_all | 1.000614 .001073 0.57 0.567 .9985135 1.00272

sp75\_512\_2\_pp\_c\_lag\_all | 1.000031 .0000533 0.58 0.565 .9999262 1.000135

sp75\_512\_pp\_c\_lag\_all | .9999998 .000013 -0.01 0.989 .9999744 1.000025

sp75\_513\_1\_pp\_c\_lag\_all | 1.000268 .0004287 0.63 0.531 .9994285 1.001109

sp75\_513\_pp\_c\_lag\_all | .9999775 .0002031 -0.11 0.912 .9995794 1.000376

sp75\_514\_pp\_c\_lag\_all | 1.000039 .000043 0.90 0.366 .9999546 1.000123

sp75\_515\_pp\_c\_lag\_all | .9998927 .0000303 -3.54 0.000 .9998333 .9999521

sp75\_516\_1\_pp\_c\_lag\_all | .9989318 .0009942 -1.07 0.283 .9969852 1.000882

sp75\_516\_2\_pp\_c\_lag\_all | .9999397 .0000909 -0.66 0.507 .9997615 1.000118

sp75\_516\_pp\_c\_lag\_all | .9999883 .0000458 -0.26 0.798 .9998986 1.000078

sp75\_517\_1\_pp\_c\_lag\_all | .9995846 .000583 -0.71 0.476 .9984427 1.000728

sp75\_517\_pp\_c\_lag\_all | .9999974 6.70e-06 -0.39 0.699 .9999843 1.000011

sp75\_518\_1\_pp\_c\_lag\_all | .9999073 .0000744 -1.25 0.213 .9997615 1.000053

sp75\_518\_pp\_c\_lag\_all | .9999709 .0000445 -0.65 0.514 .9998837 1.000058

sp75\_519\_pp\_c\_lag\_all | .995468 .0014021 -3.22 0.001 .9927236 .9982199

sp75\_520\_pp\_c\_lag\_all | .9999127 .0000928 -0.94 0.347 .9997308 1.000095

sp75\_523\_1\_pp\_c\_lag\_all | 1.000001 .0001124 0.01 0.994 .9997805 1.000221

sp75\_523\_2\_pp\_c\_lag\_all | .9997863 .000078 -2.74 0.006 .9996335 .9999391

sp75\_523\_pp\_c\_lag\_all | 1.000052 .0000923 0.56 0.575 .9998709 1.000233

sp75\_600\_1\_pp\_c\_lag\_all | 1.000928 .0005341 1.74 0.082 .9998821 1.001976

sp75\_600\_pp\_c\_lag\_all | 1.000157 .0007509 0.21 0.834 .9986863 1.00163

sp75\_601\_1\_pp\_c\_lag\_all | .9999866 .0000388 -0.35 0.729 .9999105 1.000063

sp75\_601\_2\_pp\_c\_lag\_all | .9999885 .0005381 -0.02 0.983 .9989344 1.001044

sp75\_601\_3\_pp\_c\_lag\_all | .999929 .0004502 -0.16 0.875 .999047 1.000812

sp75\_601\_pp\_c\_lag\_all | 1.000023 .000051 0.45 0.656 .9999228 1.000123

sp75\_602\_pp\_c\_lag\_all | .9998205 .0001399 -1.28 0.199 .9995463 1.000095

sp75\_603\_pp\_c\_lag\_all | 1.000022 .0001801 0.12 0.902 .9996692 1.000375

sp75\_604\_pp\_c\_lag\_all | 1.000001 .0000125 0.10 0.919 .9999768 1.000026

sp75\_605\_pp\_c\_lag\_all | 1.00007 .0000593 1.18 0.240 .9999535 1.000186

sp75\_606\_pp\_c\_lag\_all | .9999936 .000019 -0.34 0.736 .9999564 1.000031

sp75\_607\_pp\_c\_lag\_all | .9997744 .0001797 -1.26 0.209 .9994223 1.000127

sp75\_700\_1\_pp\_c\_lag\_all | .9996044 .0005039 -0.78 0.432 .9986173 1.000592

sp75\_700\_pp\_c\_lag\_all | .9999095 .0001636 -0.55 0.580 .9995889 1.00023

sp75\_701\_1\_pp\_c\_lag\_all | 1.000087 .0001695 0.52 0.606 .9997553 1.00042

sp75\_701\_2\_pp\_c\_lag\_all | .9997051 .0002526 -1.17 0.243 .9992102 1.0002

sp75\_701\_3\_pp\_c\_lag\_all | 1.000346 .0001949 1.78 0.075 .9999645 1.000729

sp75\_701\_4\_pp\_c\_lag\_all | 1.000729 .0007349 0.99 0.321 .9992895 1.00217

sp75\_701\_pp\_c\_lag\_all | .9999724 .0000382 -0.72 0.470 .9998975 1.000047

sp75\_702\_1\_pp\_c\_lag\_all | .9991507 .0019477 -0.44 0.663 .9953406 1.002975

sp75\_702\_pp\_c\_lag\_all | 1.000403 .0007299 0.55 0.580 .9989739 1.001835

sp75\_703\_1\_pp\_c\_lag\_all | .9957769 .0015097 -2.79 0.005 .9928222 .9987403

sp75\_703\_2\_pp\_c\_lag\_all | 1.000722 .0006569 1.10 0.271 .9994354 1.002011

sp75\_703\_3\_pp\_c\_lag\_all | 1.000653 .000274 2.38 0.017 1.000116 1.00119

sp75\_703\_4\_pp\_c\_lag\_all | 1.004028 .0012349 3.27 0.001 1.001611 1.006452

sp75\_703\_pp\_c\_lag\_all | 1.000068 .000095 0.71 0.477 .9998814 1.000254

sp75\_704\_pp\_c\_lag\_all | .9990247 .0005811 -1.68 0.093 .9978865 1.000164

sp75\_705\_1\_pp\_c\_lag\_all | 1.000477 .000331 1.44 0.149 .9998288 1.001126

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

sp75\_705\_8\_pp\_c\_lag\_all | .9952936 .0014638 -3.21 0.001 .9924287 .9981667

sp75\_705\_pp\_c\_lag\_all | 1.000027 .0008257 0.03 0.974 .9984103 1.001647

sp75\_706\_pp\_c\_lag\_all | 1.000074 .0002791 0.26 0.791 .9995271 1.000621

sp75\_800\_2\_pp\_c\_lag\_all | .9958965 .0004472 -9.16 0.000 .9950203 .9967734

sp75\_800\_3\_pp\_c\_lag\_all | .9997313 .0003199 -0.84 0.401 .9991046 1.000358

sp75\_800\_4\_pp\_c\_lag\_all | .9994474 .0003826 -1.44 0.149 .9986978 1.000198

sp75\_800\_pp\_c\_lag\_all | .9999111 .0001973 -0.45 0.652 .9995245 1.000298

sp75\_801\_pp\_c\_lag\_all | .9995043 .0007155 -0.69 0.489 .9981029 1.000908

sp75\_802\_pp\_c\_lag\_all | 1.00006 .0005083 0.12 0.906 .9990642 1.001057

sp75\_803\_2\_pp\_c\_lag\_all | .9987701 .0010851 -1.13 0.257 .9966456 1.000899

sp75\_803\_pp\_c\_lag\_all | 1.000567 .0002331 2.43 0.015 1.000111 1.001024

sp75\_812\_pp\_c\_lag\_all | 1.00065 .0004674 1.39 0.164 .9997346 1.001567

sp75\_814\_pp\_c\_lag\_all | 1.000018 .0003536 0.05 0.958 .9993258 1.000712

sp75\_815\_pp\_c\_lag\_all | .9997661 .000231 -1.01 0.311 .9993133 1.000219

sp75\_816\_pp\_c\_lag\_all | .9998843 .0000676 -1.71 0.087 .9997518 1.000017

sp75\_818\_pp\_c\_lag\_all | 1.000464 .0007758 0.60 0.549 .9989451 1.001986

sp75\_820\_pp\_c\_lag\_all | 1.000703 .0002735 2.57 0.010 1.000168 1.00124

sp75\_821\_pp\_c\_lag\_all | .9999154 .0001575 -0.54 0.591 .9996067 1.000224

sp75\_825\_pp\_c\_lag\_all | .9997709 .0003102 -0.74 0.460 .9991631 1.000379

sp75\_827\_pp\_c\_lag\_all | .9999572 .0002771 -0.15 0.877 .9994143 1.0005

sp75\_831\_pp\_c\_lag\_all | 1.001072 .0005658 1.89 0.058 .9999633 1.002181

sp75\_832\_pp\_c\_lag\_all | .9981819 .0012558 -1.45 0.148 .9957235 1.000646

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

sp75\_900\_2\_pp\_c\_lag\_all | .9977685 .0004752 -4.69 0.000 .9968374 .9987003

sp75\_900\_3\_pp\_c\_lag\_all | 1.000167 .0001615 1.04 0.301 .9998507 1.000484

sp75\_900\_4\_pp\_c\_lag\_all | .9999653 .0000745 -0.47 0.641 .9998192 1.000111

sp75\_900\_pp\_c\_lag\_all | .9999779 .0000507 -0.44 0.663 .9998786 1.000077

sp75\_901\_pp\_c\_lag\_all | 1.000036 .0002299 0.16 0.877 .9995851 1.000486

sp75\_902\_1\_pp\_c\_lag\_all | 1.000472 .001442 0.33 0.743 .9976496 1.003302

sp75\_902\_2\_pp\_c\_lag\_all | 1.000082 .0000589 1.39 0.164 .9999665 1.000197

sp75\_902\_4\_pp\_c\_lag\_all | 1.000074 .0001368 0.54 0.587 .9998063 1.000342

sp75\_902\_pp\_c\_lag\_all | 1.000037 .000053 0.70 0.484 .9999333 1.000141

sp75\_903\_pp\_c\_lag\_all | 1.000003 .0000836 0.04 0.972 .9998391 1.000167

sp75\_904\_pp\_c\_lag\_all | 1.000035 .0000181 1.95 0.051 .9999999 1.000071

sp75\_905\_pp\_c\_lag\_all | .9989899 .0006477 -1.56 0.119 .9977211 1.00026

sp75\_907\_pp\_c\_lag\_all | .9998061 .0001354 -1.43 0.152 .9995406 1.000072

sp77\_103\_pp\_c\_lag\_all | .9996569 .0003565 -0.96 0.336 .9989584 1.000356

sp77\_104\_pp\_c\_lag\_all | .9993907 .0016521 -0.37 0.712 .9961579 1.002634

sp77\_1103\_pp\_c\_lag\_all | 1.000032 .000047 0.67 0.501 .9999395 1.000124

sp77\_1104\_pp\_c\_lag\_all | 1.000001 .0000198 0.06 0.955 .9999622 1.00004

sp77\_1106\_pp\_c\_lag\_all | .9974915 .0010843 -2.31 0.021 .9953686 .9996189

sp77\_1111\_pp\_c\_lag\_all | 1.000627 .0007897 0.79 0.427 .9990808 1.002176

sp77\_1112\_pp\_c\_lag\_all | 1.000227 .0002247 1.01 0.313 .9997863 1.000667

sp77\_1403\_pp\_c\_lag\_all | .9999995 .0004161 -0.00 0.999 .9991842 1.000815

sp77\_1432\_pp\_c\_lag\_all | .9979201 .0008025 -2.59 0.010 .9963483 .9994942

sp77\_1433\_pp\_c\_lag\_all | .999841 .000469 -0.34 0.735 .9989222 1.000761

sp77\_1434\_pp\_c\_lag\_all | .9993716 .0004407 -1.43 0.154 .9985082 1.000236

sp77\_1437\_pp\_c\_lag\_all | .9993568 .0004646 -1.38 0.166 .9984466 1.000268

sp77\_1438\_pp\_c\_lag\_all | 1.002816 .0029766 0.95 0.343 .9969995 1.008667

sp77\_1605\_pp\_c\_lag\_all | 1.000037 .0000291 1.26 0.207 .9999797 1.000094

sp77\_1606\_pp\_c\_lag\_all | .9999878 .0000329 -0.37 0.711 .9999233 1.000052

sp77\_1710\_pp\_c\_lag\_all | 1.000151 .0000752 2.01 0.044 1.000004 1.000299

sp77\_1802\_pp\_c\_lag\_all | .9998375 .0012022 -0.14 0.892 .997484 1.002197

sp77\_1906\_pp\_c\_lag\_all | 1.001637 .0011114 1.47 0.140 .9994611 1.003818

sp77\_1915\_pp\_c\_lag\_all | .9993166 .0004195 -1.63 0.103 .9984946 1.000139

sp77\_1916\_pp\_c\_lag\_all | .9992218 .000462 -1.68 0.092 .9983167 1.000128

sp77\_200\_pp\_c\_lag\_all | 1.000033 .0000279 1.20 0.229 .9999789 1.000088

sp77\_202\_pp\_c\_lag\_all | .9998924 .0000413 -2.61 0.009 .9998115 .9999732

sp77\_203\_pp\_c\_lag\_all | .9998732 .0003185 -0.40 0.691 .9992492 1.000498

sp77\_204\_pp\_c\_lag\_all | 1.000033 .0000707 0.47 0.638 .9998947 1.000172

sp77\_205\_pp\_c\_lag\_all | 1.000004 .0000216 0.18 0.855 .9999616 1.000046

sp77\_206\_pp\_c\_lag\_all | 1.000108 .0001412 0.77 0.443 .9998316 1.000385

sp77\_207\_pp\_c\_lag\_all | 1.000166 .0001064 1.56 0.118 .9999578 1.000375

sp77\_208\_pp\_c\_lag\_all | 1.000074 .0000395 1.86 0.063 .9999961 1.000151

sp77\_210\_pp\_c\_lag\_all | 1.000583 .0001997 2.92 0.003 1.000192 1.000975

sp77\_216\_pp\_c\_lag\_all | .9999713 .0000964 -0.30 0.766 .9997825 1.00016

sp77\_305\_pp\_c\_lag\_all | .9965647 .0023951 -1.43 0.152 .9918813 1.00127

sp77\_309\_pp\_c\_lag\_all | .9961028 .0019088 -2.04 0.042 .9923686 .9998511

sp77\_314\_pp\_c\_lag\_all | 1.002139 .002471 0.87 0.386 .997308 1.006994

sp77\_315\_pp\_c\_lag\_all | .9981168 .0018351 -1.03 0.305 .9945267 1.00172

sp77\_400\_pp\_c\_lag\_all | .9999706 .0000225 -1.31 0.191 .9999266 1.000015

sp77\_401\_pp\_c\_lag\_all | 1.000013 .0001431 0.09 0.928 .9997325 1.000293

sp77\_402\_pp\_c\_lag\_all | .9997182 .0001461 -1.93 0.054 .9994319 1.000005

sp77\_403\_1\_pp\_c\_lag\_all | .9996998 .0002706 -1.11 0.267 .9991697 1.00023

sp77\_403\_2\_pp\_c\_lag\_all | .9975218 .002717 -0.91 0.362 .9922107 1.002861

sp77\_403\_pp\_c\_lag\_all | .9995862 .0005563 -0.74 0.457 .9984965 1.000677

sp77\_404\_pp\_c\_lag\_all | .9999611 .0000205 -1.90 0.058 .9999209 1.000001

sp77\_405\_pp\_c\_lag\_all | .9993862 .0002644 -2.32 0.020 .9988681 .9999045

sp77\_408\_pp\_c\_lag\_all | 1.000446 .0002894 1.54 0.123 .9998792 1.001014

sp77\_409\_pp\_c\_lag\_all | 1.00019 .0009155 0.21 0.835 .9983977 1.001986

sp77\_410\_pp\_c\_lag\_all | .9999983 .000048 -0.04 0.972 .9999042 1.000092

sp77\_411\_pp\_c\_lag\_all | .9979349 .0007789 -2.65 0.008 .9964094 .9994628

sp77\_412\_pp\_c\_lag\_all | .9997018 .0002616 -1.14 0.254 .9991891 1.000215

sp77\_413\_pp\_c\_lag\_all | 1.001281 .001 1.28 0.200 .9993227 1.003243

sp77\_500\_pp\_c\_lag\_all | .9995293 .0003077 -1.53 0.126 .9989263 1.000133

sp77\_501\_pp\_c\_lag\_all | 1.000453 .0002597 1.74 0.081 .9999437 1.000962

sp77\_502\_1\_pp\_c\_lag\_all | 1.002021 .001545 1.31 0.190 .9989974 1.005054

sp77\_502\_2\_pp\_c\_lag\_all | 1.000483 .0001986 2.43 0.015 1.000094 1.000872

sp77\_502\_pp\_c\_lag\_all | .9999693 .0000247 -1.24 0.214 .9999208 1.000018

sp77\_503\_1\_pp\_c\_lag\_all | .9996665 .0006827 -0.49 0.625 .9983293 1.001006

sp77\_503\_pp\_c\_lag\_all | .9996086 .0004279 -0.91 0.360 .9987703 1.000448

sp77\_504\_pp\_c\_lag\_all | 1.000003 .0001038 0.03 0.979 .9997993 1.000206

sp77\_505\_pp\_c\_lag\_all | .9999109 .0000559 -1.59 0.111 .9998013 1.00002

sp77\_506\_1\_pp\_c\_lag\_all | 1.000063 .0000738 0.85 0.395 .9999181 1.000207

sp77\_506\_pp\_c\_lag\_all | .9999697 .0000846 -0.36 0.721 .9998039 1.000136

sp77\_507\_pp\_c\_lag\_all | 1.000022 .0003116 0.07 0.944 .9994114 1.000633

sp77\_508\_1\_pp\_c\_lag\_all | 1.00148 .0004472 3.31 0.001 1.000604 1.002357

sp77\_508\_pp\_c\_lag\_all | .9997586 .0002854 -0.85 0.398 .9991994 1.000318

sp77\_509\_pp\_c\_lag\_all | .9999716 .0001318 -0.22 0.829 .9997133 1.00023

sp77\_510\_pp\_c\_lag\_all | .9988087 .0005539 -2.15 0.032 .9977236 .9998949

sp77\_511\_pp\_c\_lag\_all | .9999829 .0004758 -0.04 0.971 .9990507 1.000916

sp77\_512\_pp\_c\_lag\_all | .9999594 .0000546 -0.74 0.457 .9998524 1.000066

sp77\_513\_pp\_c\_lag\_all | 1.00019 .0000991 1.92 0.055 .9999962 1.000385

sp77\_514\_pp\_c\_lag\_all | .9995551 .0008488 -0.52 0.600 .9978929 1.00122

sp77\_515\_pp\_c\_lag\_all | 1.002945 .0013546 2.18 0.029 1.000293 1.005603

sp77\_516\_pp\_c\_lag\_all | .9999797 .0000311 -0.65 0.513 .9999187 1.000041

sp77\_600\_pp\_c\_lag\_all | .9995584 .0004193 -1.05 0.292 .9987369 1.000381

sp77\_601\_pp\_c\_lag\_all | .9998391 .0003898 -0.41 0.680 .9990753 1.000603

sp77\_602\_pp\_c\_lag\_all | 1.001545 .0009386 1.65 0.099 .9997074 1.003387

sp77\_603\_pp\_c\_lag\_all | 1.001327 .0006033 2.20 0.028 1.000146 1.00251

sp77\_604\_pp\_c\_lag\_all | .9997298 .0003326 -0.81 0.417 .9990781 1.000382

sp77\_605\_pp\_c\_lag\_all | .9967273 .0011384 -2.87 0.004 .9944986 .9989609

sp77\_606\_1\_pp\_c\_lag\_all | .9995587 .0014316 -0.31 0.758 .9967568 1.002368

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

sp77\_700\_1\_pp\_c\_lag\_all | .999471 .0007303 -0.72 0.469 .9980407 1.000903

sp77\_700\_pp\_c\_lag\_all | 1.000723 .0002963 2.44 0.015 1.000142 1.001304

sp77\_701\_1\_pp\_c\_lag\_all | 1.000577 .0004326 1.34 0.182 .99973 1.001426

sp77\_701\_2\_pp\_c\_lag\_all | .9991699 .0002804 -2.96 0.003 .9986204 .9997197

sp77\_701\_pp\_c\_lag\_all | .9999634 .0000843 -0.43 0.664 .9997982 1.000129

sp75\_804\_pp\_c\_lag\_all | .9999992 .0000837 -0.01 0.992 .9998351 1.000163

sp75\_805\_pp\_c\_lag\_all | 1.00039 .0003953 0.99 0.323 .9996158 1.001166

sp75\_806\_pp\_c\_lag\_all | 1.005919 .0026405 2.25 0.025 1.000757 1.011108

sp75\_807\_pp\_c\_lag\_all | 1.000065 .000027 2.41 0.016 1.000012 1.000118

sp75\_808\_pp\_c\_lag\_all | .9997476 .0002605 -0.97 0.333 .9992372 1.000258

sp75\_809\_pp\_c\_lag\_all | 1.000228 .0001174 1.94 0.052 .9999979 1.000458

sp75\_810\_pp\_c\_lag\_all | 1.000128 .0001605 0.80 0.424 .9998139 1.000443

sp75\_811\_pp\_c\_lag\_all | 1.000101 .0001115 0.90 0.366 .9998823 1.000319

sp77\_703\_pp\_c\_lag\_all | .9959522 .0009755 -4.14 0.000 .9940421 .9978659

sp77\_704\_1\_pp\_c\_lag\_all | 1.000082 .0004405 0.19 0.852 .9992191 1.000946

sp77\_704\_8\_pp\_c\_lag\_all | .9991987 .0006077 -1.32 0.188 .9980083 1.000391

sp77\_704\_9\_pp\_c\_lag\_all | .996377 .0008231 -4.39 0.000 .994765 .9979917

sp77\_704\_pp\_c\_lag\_all | 1.000406 .0009688 0.42 0.675 .9985091 1.002307

sp77\_705\_pp\_c\_lag\_all | .9999208 .000164 -0.48 0.629 .9995994 1.000242

sp77\_800\_1\_pp\_c\_lag\_all | 1.001769 .0005297 3.34 0.001 1.000731 1.002807

sp77\_800\_2\_pp\_c\_lag\_all | .9993143 .0003944 -1.74 0.082 .9985416 1.000087

sp77\_800\_pp\_c\_lag\_all | .9994018 .0005225 -1.14 0.252 .9983782 1.000426

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

sp77\_802\_pp\_c\_lag\_all | .9997653 .0006316 -0.37 0.710 .998528 1.001004

sp77\_803\_pp\_c\_lag\_all | 1.00169 .0005711 2.96 0.003 1.000571 1.00281

sp77\_804\_pp\_c\_lag\_all | .9954461 .0007141 -6.36 0.000 .9940475 .9968468

sp77\_805\_pp\_c\_lag\_all | .9971596 .0011546 -2.46 0.014 .9948991 .9994252

sp77\_807\_1\_pp\_c\_lag\_all | .9993249 .0006577 -1.03 0.305 .9980367 1.000615

sp77\_807\_2\_pp\_c\_lag\_all | 1.001002 .0005242 1.91 0.056 .9999747 1.002029

sp77\_807\_3\_pp\_c\_lag\_all | 1.000919 .0006178 1.49 0.137 .9997085 1.00213

sp77\_807\_pp\_c\_lag\_all | .9997271 .0005674 -0.48 0.631 .9986156 1.00084

sp77\_808\_pp\_c\_lag\_all | 1.000761 .0007626 1.00 0.318 .9992672 1.002256

sp77\_809\_pp\_c\_lag\_all | 1.000034 .0002654 0.13 0.898 .9995139 1.000554

sp77\_810\_pp\_c\_lag\_all | 1.000155 .000447 0.35 0.729 .9992793 1.001031

sp77\_900\_1\_pp\_c\_lag\_all | 1.000627 .000685 0.92 0.360 .9992849 1.00197

sp77\_900\_2\_pp\_c\_lag\_all | 1.000496 .000355 1.40 0.162 .9998009 1.001192

sp77\_900\_pp\_c\_lag\_all | 1.000103 .0002895 0.36 0.722 .9995357 1.00067

sp77\_901\_1\_pp\_c\_lag\_all | .9951956 .0009686 -4.95 0.000 .993299 .9970958

sp77\_901\_pp\_c\_lag\_all | 1.000409 .0003455 1.18 0.237 .9997315 1.001086

sp77\_902\_pp\_c\_lag\_all | .9989692 .0004083 -2.52 0.012 .9981693 .9997698

sp77\_903\_pp\_c\_lag\_all | 1.000736 .0005563 1.32 0.185 .9996466 1.001827

sp77\_904\_pp\_c\_lag\_all | .9998438 .0001131 -1.38 0.167 .9996221 1.000065

mine\_time | .9939179 .0095917 -0.63 0.527 .9752952 1.012896

onsite\_insp\_hours | .9999956 .0000388 -0.11 0.910 .9999195 1.000072

|

state |

1 | 1.149718 .1742582 0.92 0.357 .8542367 1.547407

2 | 2.158951 .1633992 10.17 0.000 1.861316 2.50418

3 | 1.043701 .1779144 0.25 0.802 .7472672 1.457726

4 | .9165218 .1001788 -0.80 0.425 .7397819 1.135486

5 | .7506392 .1170067 -1.84 0.066 .5530308 1.018857

6 | .8850792 .0543264 -1.99 0.047 .7847569 .9982267

7 | 1.086898 .2878781 0.31 0.753 .6467516 1.826584

8 | .4163898 .1274221 -2.86 0.004 .2285696 .7585456

9 | .8318417 .4774072 -0.32 0.748 .2700987 2.56188

10 | .7526987 .117068 -1.83 0.068 .5549232 1.020962

11 | 1.027332 .2857546 0.10 0.923 .5955902 1.772044

12 | 1.106038 .0987572 1.13 0.259 .928468 1.317568

13 | 1.197076 .1853124 1.16 0.245 .8837963 1.621404

14 | .6513868 .077715 -3.59 0.000 .5155665 .8229875

15 | .6958374 .0523126 -4.82 0.000 .6005027 .8063072

17 | .6625002 .2850901 -0.96 0.339 .2850317 1.539852

|

time |

2000 | 1.095627 .0678556 1.47 0.140 .9703874 1.23703

2002 | .9788416 .0532851 -0.39 0.694 .8797832 1.089053

2003 | .8472008 .0508767 -2.76 0.006 .753129 .9530228

2004 | .8752775 .0570447 -2.04 0.041 .7703181 .994538

2005 | .7725487 .0506616 -3.94 0.000 .6793702 .8785071

2006 | .7423205 .0533495 -4.15 0.000 .6447877 .8546063

2007 | .6967562 .0500587 -5.03 0.000 .6052377 .8021133

2008 | .6064701 .0465675 -6.51 0.000 .5217355 .7049665

2009 | .5501122 .0441994 -7.44 0.000 .4699595 .6439351

2010 | .5399733 .046406 -7.17 0.000 .4562669 .6390364

2011 | .5594183 .0478726 -6.79 0.000 .4730363 .6615747

2012 | .5558466 .0491624 -6.64 0.000 .4673795 .6610592

2013 | .5039719 .0476699 -7.24 0.000 .4186899 .6066248

2014 | .4480007 .0472386 -7.62 0.000 .3643555 .5508483

2015 | .4397364 .0499183 -7.24 0.000 .3520181 .5493129

|

\_cons | .0000172 1.09e-06 -173.90 0.000 .0000152 .0000195

ln(hours) | 1 (exposure)

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**. estat gof**

Deviance goodness-of-fit = 7270.697

Prob > chi2(5952) = 0.0000

Pearson goodness-of-fit = 8030.643

Prob > chi2(5952) = 0.0000

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

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

note: sp48\_4\_pp\_c\_lag\_all omitted because of collinearity

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

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

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

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

Iteration 0: log pseudolikelihood = -9130.8066

Iteration 1: log pseudolikelihood = -8962.2948

Iteration 2: log pseudolikelihood = -8960.8967

Iteration 3: log pseudolikelihood = -8960.895

Iteration 4: log pseudolikelihood = -8960.895

Generalized linear models No. of obs = 6,253

Optimization : ML Residual df = 5,940

Scale parameter = 1

Deviance = 3608.027676 (1/df) Deviance = .6074121

Pearson = 3881.162897 (1/df) Pearson = .6533944

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

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

AIC = 2.966223

Log pseudolikelihood = -8960.895012 BIC = -48312.42

(Std. Err. adjusted for 1,238 clusters in mineid)

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| Robust

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

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

sp47\_41\_pp\_c\_lag\_all | 1.000332 .0001862 1.78 0.075 .9999667 1.000697

sp47\_42\_pp\_c\_lag\_all | .9990687 .0006331 -1.47 0.141 .9978285 1.00031

sp47\_44\_pp\_c\_lag\_all | 1.000003 .0002763 0.01 0.993 .9994613 1.000544

sp48\_11\_pp\_c\_lag\_all | .9998911 .0001734 -0.63 0.530 .9995513 1.000231

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

sp48\_25\_pp\_c\_lag\_all | .9995069 .0004009 -1.23 0.219 .9987215 1.000293

sp48\_26\_pp\_c\_lag\_all | 1.000403 .0004154 0.97 0.332 .9995892 1.001218

sp48\_27\_pp\_c\_lag\_all | 1.000495 .0002435 2.03 0.042 1.000018 1.000972

sp48\_28\_pp\_c\_lag\_all | .9990495 .0003824 -2.48 0.013 .9983003 .9997992

sp48\_4\_pp\_c\_lag\_all | 1 (omitted)

sp48\_5\_pp\_c\_lag\_all | 1.000341 .0004552 0.75 0.454 .999449 1.001233

sp48\_6\_pp\_c\_lag\_all | 1.00041 .0001754 2.34 0.019 1.000066 1.000754

sp48\_7\_pp\_c\_lag\_all | 1.000262 .0001934 1.36 0.175 .9998834 1.000641

sp48\_8\_pp\_c\_lag\_all | 1.000003 .0003359 0.01 0.993 .9993448 1.000662

sp71\_701\_pp\_c\_lag\_all | .9981227 .0013063 -1.44 0.151 .9955657 1.000686

sp72\_503\_pp\_c\_lag\_all | .9997123 .0002388 -1.20 0.228 .9992444 1.00018

sp72\_610\_pp\_c\_lag\_all | .9981941 .0017814 -1.01 0.311 .9947087 1.001692

sp72\_620\_pp\_c\_lag\_all | 1.000632 .0010969 0.58 0.565 .9984842 1.002784

sp72\_630\_pp\_c\_lag\_all | 1.000001 .0000257 0.03 0.977 .9999504 1.000051

sp75\_100\_pp\_c\_lag\_all | 1.000059 .0006443 0.09 0.927 .998797 1.001323

sp75\_1001\_1\_pp\_c\_lag\_all | .9996022 .000922 -0.43 0.666 .9977967 1.001411

sp75\_1001\_pp\_c\_lag\_all | 1.001482 .0010367 1.43 0.153 .9994517 1.003515

sp75\_1003\_1\_pp\_c\_lag\_all | 1.000096 .0008226 0.12 0.907 .9984852 1.00171

sp75\_1100\_2\_pp\_c\_lag\_all | 1.000033 .0000243 1.36 0.174 .9999854 1.000081

sp75\_1101\_20\_pp\_c\_lag\_all | 1.00024 .0004204 0.57 0.568 .9994161 1.001064

sp75\_1102\_pp\_c\_lag\_all | 1.000124 .0002753 0.45 0.653 .9995844 1.000664

sp75\_1103\_4\_pp\_c\_lag\_all | 1.000004 .0000428 0.10 0.923 .9999203 1.000088

sp75\_1104\_pp\_c\_lag\_all | .999884 .0001278 -0.91 0.364 .9996335 1.000135

sp75\_1106\_2\_pp\_c\_lag\_all | .9999056 .0001568 -0.60 0.547 .9995983 1.000213

sp75\_1106\_3\_pp\_c\_lag\_all | 1.000023 .0000487 0.47 0.639 .9999274 1.000118

sp75\_1106\_4\_pp\_c\_lag\_all | .9997236 .0004013 -0.69 0.491 .9989373 1.00051

sp75\_1106\_5\_pp\_c\_lag\_all | .9997975 .000146 -1.39 0.165 .9995113 1.000084

sp75\_1106\_6\_pp\_c\_lag\_all | .9993888 .0028533 -0.21 0.830 .993812 1.004997

sp75\_1106\_pp\_c\_lag\_all | 1.001052 .0005539 1.90 0.057 .9999673 1.002139

sp75\_1107\_14\_pp\_c\_lag\_all | 1.003645 .0014349 2.54 0.011 1.000837 1.006461

sp75\_1400\_1\_pp\_c\_lag\_all | .999773 .0006101 -0.37 0.710 .9985779 1.000969

sp75\_1400\_2\_pp\_c\_lag\_all | .9981995 .0013217 -1.36 0.174 .9956123 1.000793

sp75\_1400\_3\_pp\_c\_lag\_all | .9999907 .0002427 -0.04 0.969 .9995151 1.000466

sp75\_1400\_4\_pp\_c\_lag\_all | .9997616 .0005196 -0.46 0.646 .9987437 1.00078

sp75\_1400\_pp\_c\_lag\_all | 1.000383 .0002028 1.89 0.059 .9999853 1.00078

sp75\_1401\_1\_pp\_c\_lag\_all | 1.00028 .0033162 0.08 0.933 .9938015 1.006801

sp75\_1401\_pp\_c\_lag\_all | 1.001154 .001315 0.88 0.380 .9985802 1.003735

sp75\_1403\_10\_pp\_c\_lag\_all | 1.000156 .0000569 2.74 0.006 1.000044 1.000267

sp75\_1403\_11\_pp\_c\_lag\_all | .997625 .0009934 -2.39 0.017 .9956799 .9995739

sp75\_1403\_3\_pp\_c\_lag\_all | .9969835 .0015169 -1.99 0.047 .9940148 .9999611

sp75\_1403\_4\_pp\_c\_lag\_all | 1.004904 .0020461 2.40 0.016 1.000902 1.008922

sp75\_1403\_5\_pp\_c\_lag\_all | .9999671 .0000269 -1.22 0.222 .9999144 1.00002

sp75\_1403\_6\_pp\_c\_lag\_all | .9999679 .000026 -1.23 0.217 .999917 1.000019

sp75\_1403\_7\_pp\_c\_lag\_all | .9999163 .0001444 -0.58 0.562 .9996333 1.000199

sp75\_1403\_8\_pp\_c\_lag\_all | 1.000014 .0000269 0.53 0.594 .9999616 1.000067

sp75\_1403\_9\_pp\_c\_lag\_all | 1.000266 .0002099 1.27 0.204 .9998551 1.000678

sp75\_1404\_1\_pp\_c\_lag\_all | .9948111 .0014823 -3.49 0.000 .9919101 .9977205

sp75\_1404\_pp\_c\_lag\_all | .9987623 .0010271 -1.20 0.228 .9967512 1.000777

sp75\_1405\_1\_pp\_c\_lag\_all | 1.000169 .000801 0.21 0.833 .9985998 1.00174

sp75\_1405\_pp\_c\_lag\_all | .9999408 .0000645 -0.92 0.359 .9998145 1.000067

sp75\_1431\_pp\_c\_lag\_all | 1.002302 .0036457 0.63 0.527 .9951824 1.009473

sp75\_1432\_pp\_c\_lag\_all | 1.000426 .0004877 0.87 0.382 .9994708 1.001383

sp75\_1433\_pp\_c\_lag\_all | .999895 .0003587 -0.29 0.770 .9991922 1.000598

sp75\_1434\_pp\_c\_lag\_all | .9998996 .0003182 -0.32 0.752 .9992762 1.000523

sp75\_1435\_pp\_c\_lag\_all | .9965686 .0017193 -1.99 0.046 .9932046 .9999441

sp75\_1437\_pp\_c\_lag\_all | .9983192 .0009698 -1.73 0.083 .9964201 1.000222

sp75\_150\_pp\_c\_lag\_all | 1.000122 .0005806 0.21 0.833 .9989849 1.001261

sp75\_151\_pp\_c\_lag\_all | .9996681 .0011231 -0.30 0.768 .9974692 1.001872

sp75\_153\_pp\_c\_lag\_all | 1.003367 .00118 2.86 0.004 1.001057 1.005682

sp75\_156\_pp\_c\_lag\_all | .9980727 .0010618 -1.81 0.070 .9959937 1.000156

sp75\_160\_pp\_c\_lag\_all | .9983773 .001981 -0.82 0.413 .9945021 1.002268

sp75\_1600\_2\_pp\_c\_lag\_all | .9999118 .00007 -1.26 0.208 .9997746 1.000049

sp75\_1712\_10\_pp\_c\_lag\_all | .9991869 .0002739 -2.97 0.003 .9986502 .9997239

sp75\_1712\_6\_pp\_c\_lag\_all | 1.000087 .0002052 0.42 0.672 .9996849 1.000489

sp75\_1720\_pp\_c\_lag\_all | .9998947 .0001413 -0.75 0.456 .9996177 1.000172

sp75\_1721\_pp\_c\_lag\_all | .9976082 .0006427 -3.72 0.000 .9963494 .9988686

sp75\_1725\_pp\_c\_lag\_all | 1.000016 8.83e-06 1.85 0.065 .999999 1.000034

sp75\_1726\_pp\_c\_lag\_all | 1.000887 .0002735 3.25 0.001 1.000351 1.001424

sp75\_1727\_pp\_c\_lag\_all | 1.002195 .0008796 2.50 0.012 1.000472 1.00392

sp75\_1728\_pp\_c\_lag\_all | 1.000287 .0011697 0.25 0.806 .9979973 1.002582

sp75\_1729\_pp\_c\_lag\_all | .9987938 .0005173 -2.33 0.020 .9977805 .9998081

sp75\_1730\_pp\_c\_lag\_all | 1.000243 .0003986 0.61 0.542 .9994619 1.001025

sp75\_1731\_pp\_c\_lag\_all | 1.000006 6.94e-06 0.80 0.424 .9999919 1.000019

sp75\_1903\_pp\_c\_lag\_all | 1.000363 .0001473 2.46 0.014 1.000074 1.000651

sp75\_1909\_pp\_c\_lag\_all | .999975 .0000186 -1.34 0.180 .9999386 1.000012

sp75\_1910\_pp\_c\_lag\_all | 1.000067 .0000308 2.19 0.028 1.000007 1.000128

sp75\_1911\_pp\_c\_lag\_all | .999961 .0000468 -0.83 0.405 .9998694 1.000053

sp75\_1912\_pp\_c\_lag\_all | 1.000611 .0003053 2.00 0.045 1.000012 1.001209

sp75\_1913\_pp\_c\_lag\_all | 1.000705 .0004706 1.50 0.134 .999783 1.001628

sp75\_1914\_pp\_c\_lag\_all | .9999658 .0000213 -1.61 0.107 .9999241 1.000007

sp75\_1915\_pp\_c\_lag\_all | 1.000467 .0004287 1.09 0.276 .9996272 1.001308

sp75\_202\_pp\_c\_lag\_all | .9999967 4.27e-06 -0.76 0.446 .9999884 1.000005

sp75\_208\_pp\_c\_lag\_all | 1.000011 .0000565 0.20 0.845 .9999003 1.000122

sp75\_211\_pp\_c\_lag\_all | 1.000061 .0000568 1.08 0.281 .9999499 1.000173

sp75\_212\_pp\_c\_lag\_all | 1.000082 .0001205 0.68 0.496 .9998458 1.000318

sp75\_214\_pp\_c\_lag\_all | .9998573 .0001268 -1.12 0.261 .9996088 1.000106

sp75\_312\_pp\_c\_lag\_all | 1.000003 .0000968 0.03 0.974 .9998135 1.000193

sp75\_320\_pp\_c\_lag\_all | .9999254 .0000677 -1.10 0.271 .9997927 1.000058

sp75\_324\_pp\_c\_lag\_all | .9992917 .0002574 -2.75 0.006 .9987874 .9997963

sp75\_337\_pp\_c\_lag\_all | 1.000125 .0001008 1.24 0.215 .9999274 1.000323

sp75\_340\_pp\_c\_lag\_all | .9999752 .000037 -0.67 0.503 .9999026 1.000048

sp75\_341\_pp\_c\_lag\_all | .9988384 .0022014 -0.53 0.598 .994533 1.003162

sp75\_342\_pp\_c\_lag\_all | .9999938 .000018 -0.34 0.732 .9999585 1.000029

sp75\_344\_pp\_c\_lag\_all | .9999253 .0002855 -0.26 0.794 .9993659 1.000485

sp75\_352\_pp\_c\_lag\_all | 1.00031 .0002302 1.35 0.177 .9998593 1.000762

sp75\_382\_pp\_c\_lag\_all | .9999087 .0002188 -0.42 0.676 .9994799 1.000338

sp75\_503\_pp\_c\_lag\_all | .9999995 8.02e-06 -0.06 0.953 .9999838 1.000015

sp75\_504\_pp\_c\_lag\_all | 1.000458 .0004201 1.09 0.276 .9996345 1.001281

sp75\_505\_pp\_c\_lag\_all | 1.000789 .0005724 1.38 0.168 .9996678 1.001911

sp75\_506\_1\_pp\_c\_lag\_all | 1.001166 .0003041 3.84 0.000 1.00057 1.001762

sp75\_506\_pp\_c\_lag\_all | .9993536 .0003332 -1.94 0.052 .9987008 1.000007

sp75\_507\_pp\_c\_lag\_all | .9999422 .0001269 -0.46 0.649 .9996934 1.000191

sp75\_511\_1\_pp\_c\_lag\_all | 1.0027 .0022188 1.22 0.223 .9983604 1.007058

sp75\_511\_pp\_c\_lag\_all | 1.000024 .0001719 0.14 0.889 .9996873 1.000361

sp75\_512\_1\_pp\_c\_lag\_all | 1.001555 .001403 1.11 0.267 .9988089 1.004309

sp75\_512\_2\_pp\_c\_lag\_all | 1.000028 .0000592 0.47 0.641 .9999115 1.000144

sp75\_512\_pp\_c\_lag\_all | 1.000009 .0000171 0.50 0.615 .9999751 1.000042

sp75\_513\_1\_pp\_c\_lag\_all | 1.000204 .0005172 0.40 0.693 .9991912 1.001219

sp75\_513\_pp\_c\_lag\_all | .9999758 .0002391 -0.10 0.919 .9995074 1.000444

sp75\_514\_pp\_c\_lag\_all | 1.000041 .0000537 0.76 0.446 .9999357 1.000146

sp75\_515\_pp\_c\_lag\_all | .9998862 .0000371 -3.07 0.002 .9998136 .9999589

sp75\_516\_1\_pp\_c\_lag\_all | .9992988 .0010375 -0.68 0.499 .9972674 1.001334

sp75\_516\_2\_pp\_c\_lag\_all | .9999312 .0001094 -0.63 0.529 .9997169 1.000146

sp75\_516\_pp\_c\_lag\_all | .999965 .0000558 -0.63 0.531 .9998556 1.000074

sp75\_517\_1\_pp\_c\_lag\_all | .9996628 .0008104 -0.42 0.677 .9980758 1.001252

sp75\_517\_pp\_c\_lag\_all | .9999939 8.22e-06 -0.74 0.461 .9999778 1.00001

sp75\_518\_1\_pp\_c\_lag\_all | .9999252 .0000928 -0.81 0.421 .9997433 1.000107

sp75\_518\_pp\_c\_lag\_all | .9999209 .0000533 -1.48 0.138 .9998164 1.000025

sp75\_519\_pp\_c\_lag\_all | .9952037 .0017678 -2.71 0.007 .991745 .9986746

sp75\_520\_pp\_c\_lag\_all | 1.000005 .0001117 0.04 0.964 .9997862 1.000224

sp75\_523\_1\_pp\_c\_lag\_all | 1.000081 .0001254 0.65 0.519 .9998351 1.000327

sp75\_523\_2\_pp\_c\_lag\_all | .9997883 .0000914 -2.32 0.021 .999609 .9999675

sp75\_523\_pp\_c\_lag\_all | .9999487 .0000963 -0.53 0.594 .9997599 1.000138

sp75\_600\_1\_pp\_c\_lag\_all | .9995007 .0006459 -0.77 0.440 .9982355 1.000767

sp75\_600\_pp\_c\_lag\_all | .9994098 .0008618 -0.68 0.494 .9977222 1.0011

sp75\_601\_1\_pp\_c\_lag\_all | 1.000016 .0000498 0.32 0.752 .9999182 1.000113

sp75\_601\_2\_pp\_c\_lag\_all | .9995634 .0005931 -0.74 0.462 .9984016 1.000727

sp75\_601\_3\_pp\_c\_lag\_all | .999575 .0006713 -0.63 0.527 .9982601 1.000892

sp75\_601\_pp\_c\_lag\_all | 1.00002 .0000637 0.31 0.758 .9998947 1.000145

sp75\_602\_pp\_c\_lag\_all | .9999031 .0001643 -0.59 0.556 .9995812 1.000225

sp75\_603\_pp\_c\_lag\_all | 1.000035 .00022 0.16 0.875 .9996035 1.000466

sp75\_604\_pp\_c\_lag\_all | 1.000001 .000015 0.05 0.957 .9999715 1.00003

sp75\_605\_pp\_c\_lag\_all | 1.000045 .0000712 0.64 0.524 .9999058 1.000185

sp75\_606\_pp\_c\_lag\_all | 1.000003 .0000241 0.13 0.897 .9999558 1.00005

sp75\_607\_pp\_c\_lag\_all | .9998152 .000209 -0.88 0.377 .9994056 1.000225

sp75\_700\_1\_pp\_c\_lag\_all | .9992398 .0005365 -1.42 0.157 .9981888 1.000292

sp75\_700\_pp\_c\_lag\_all | .999922 .0001982 -0.39 0.694 .9995335 1.000311

sp75\_701\_1\_pp\_c\_lag\_all | 1.000276 .0002304 1.20 0.231 .9998247 1.000728

sp75\_701\_2\_pp\_c\_lag\_all | .9999327 .0003428 -0.20 0.844 .999261 1.000605

sp75\_701\_3\_pp\_c\_lag\_all | 1.000174 .0002657 0.65 0.513 .9996532 1.000695

sp75\_701\_4\_pp\_c\_lag\_all | 1.000937 .0010101 0.93 0.353 .9989594 1.002919

sp75\_701\_pp\_c\_lag\_all | .9999882 .000046 -0.26 0.797 .9998981 1.000078

sp75\_702\_1\_pp\_c\_lag\_all | 1.000057 .0017355 0.03 0.974 .9966609 1.003464

sp75\_702\_pp\_c\_lag\_all | 1.000882 .0010008 0.88 0.378 .9989226 1.002846

sp75\_703\_1\_pp\_c\_lag\_all | .9950919 .0012356 -3.96 0.000 .9926731 .9975165

sp75\_703\_2\_pp\_c\_lag\_all | .9997578 .0008832 -0.27 0.784 .9980284 1.00149

sp75\_703\_3\_pp\_c\_lag\_all | 1.000682 .0003734 1.83 0.068 .9999508 1.001415

sp75\_703\_4\_pp\_c\_lag\_all | 1.004226 .0016654 2.54 0.011 1.000967 1.007496

sp75\_703\_pp\_c\_lag\_all | .9999596 .0001191 -0.34 0.735 .9997261 1.000193

sp75\_704\_pp\_c\_lag\_all | .9996534 .0008798 -0.39 0.694 .9979305 1.001379

sp75\_705\_1\_pp\_c\_lag\_all | 1.000466 .0004308 1.08 0.280 .9996215 1.00131

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

sp75\_705\_8\_pp\_c\_lag\_all | .9958512 .0018278 -2.27 0.024 .9922753 .99944

sp75\_705\_pp\_c\_lag\_all | .9990894 .0009221 -0.99 0.324 .9972838 1.000898

sp75\_706\_pp\_c\_lag\_all | .9996408 .0003772 -0.95 0.341 .9989017 1.00038

sp75\_800\_2\_pp\_c\_lag\_all | .9954181 .0005247 -8.71 0.000 .9943903 .996447

sp75\_800\_3\_pp\_c\_lag\_all | .9993677 .0004519 -1.40 0.162 .9984825 1.000254

sp75\_800\_4\_pp\_c\_lag\_all | .9992463 .0005029 -1.50 0.134 .9982611 1.000232

sp75\_800\_pp\_c\_lag\_all | .9998156 .0002788 -0.66 0.509 .9992694 1.000362

sp75\_801\_pp\_c\_lag\_all | .9988233 .0008316 -1.41 0.157 .9971946 1.000455

sp75\_802\_pp\_c\_lag\_all | .9993858 .0005771 -1.06 0.287 .9982553 1.000518

sp75\_803\_2\_pp\_c\_lag\_all | .998434 .0013335 -1.17 0.241 .9958238 1.001051

sp75\_803\_pp\_c\_lag\_all | 1.000739 .000296 2.50 0.012 1.000159 1.00132

sp75\_812\_pp\_c\_lag\_all | 1.001225 .0004966 2.47 0.014 1.000252 1.002198

sp75\_814\_pp\_c\_lag\_all | .9999407 .0003737 -0.16 0.874 .9992084 1.000673

sp75\_815\_pp\_c\_lag\_all | .9997931 .0002695 -0.77 0.443 .999265 1.000322

sp75\_816\_pp\_c\_lag\_all | .9999067 .0000736 -1.27 0.204 .9997625 1.000051

sp75\_818\_pp\_c\_lag\_all | 1.000459 .0006996 0.66 0.512 .9990884 1.001831

sp75\_820\_pp\_c\_lag\_all | 1.000714 .0002925 2.44 0.015 1.000141 1.001288

sp75\_821\_pp\_c\_lag\_all | .9997882 .0001614 -1.31 0.189 .9994718 1.000105

sp75\_825\_pp\_c\_lag\_all | .9997834 .0003988 -0.54 0.587 .9990021 1.000565

sp75\_827\_pp\_c\_lag\_all | .9998884 .0003728 -0.30 0.765 .999158 1.000619

sp75\_831\_pp\_c\_lag\_all | 1.000858 .0006385 1.34 0.179 .9996071 1.00211

sp75\_832\_pp\_c\_lag\_all | .9988821 .0012487 -0.89 0.371 .9964377 1.001333

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

sp75\_900\_2\_pp\_c\_lag\_all | .9969909 .0006279 -4.79 0.000 .995761 .9982223

sp75\_900\_3\_pp\_c\_lag\_all | 1.000045 .0001723 0.26 0.794 .9997074 1.000383

sp75\_900\_4\_pp\_c\_lag\_all | .9999842 .0000943 -0.17 0.867 .9997993 1.000169

sp75\_900\_pp\_c\_lag\_all | .999971 .0000553 -0.52 0.600 .9998627 1.000079

sp75\_901\_pp\_c\_lag\_all | .9999549 .0002614 -0.17 0.863 .9994428 1.000467

sp75\_902\_1\_pp\_c\_lag\_all | 1.000204 .0017509 0.12 0.907 .9967778 1.003641

sp75\_902\_2\_pp\_c\_lag\_all | 1.000064 .0000804 0.80 0.425 .9999066 1.000222

sp75\_902\_4\_pp\_c\_lag\_all | 1.000182 .0001447 1.26 0.209 .9998984 1.000465

sp75\_902\_pp\_c\_lag\_all | 1.000018 .0000611 0.29 0.774 .9998978 1.000137

sp75\_903\_pp\_c\_lag\_all | 1.000073 .000096 0.77 0.444 .9998853 1.000262

sp75\_904\_pp\_c\_lag\_all | 1.000023 .0000195 1.20 0.230 .9999852 1.000062

sp75\_905\_pp\_c\_lag\_all | .9986321 .0006602 -2.07 0.038 .9973389 .999927

sp75\_907\_pp\_c\_lag\_all | .9998621 .0001616 -0.85 0.394 .9995454 1.000179

sp77\_103\_pp\_c\_lag\_all | .9999423 .0004134 -0.14 0.889 .9991324 1.000753

sp77\_104\_pp\_c\_lag\_all | .9989939 .0017376 -0.58 0.563 .995594 1.002405

sp77\_1103\_pp\_c\_lag\_all | 1.000029 .0000595 0.50 0.620 .9999129 1.000146

sp77\_1104\_pp\_c\_lag\_all | .9999926 .0000228 -0.33 0.745 .9999478 1.000037

sp77\_1106\_pp\_c\_lag\_all | .9969137 .0012406 -2.48 0.013 .994485 .9993483

sp77\_1111\_pp\_c\_lag\_all | .9998248 .0007377 -0.24 0.812 .99838 1.001272

sp77\_1112\_pp\_c\_lag\_all | 1.000194 .0002529 0.77 0.443 .9996983 1.00069

sp77\_1403\_pp\_c\_lag\_all | .9997511 .0003868 -0.64 0.520 .9989933 1.000509

sp77\_1432\_pp\_c\_lag\_all | .9977959 .0009648 -2.28 0.022 .9959067 .9996886

sp77\_1433\_pp\_c\_lag\_all | .9997412 .0005781 -0.45 0.654 .9986088 1.000875

sp77\_1434\_pp\_c\_lag\_all | .9989879 .0005072 -1.99 0.046 .9979944 .9999824

sp77\_1437\_pp\_c\_lag\_all | .9992338 .0005792 -1.32 0.186 .9980993 1.00037

sp77\_1438\_pp\_c\_lag\_all | 1.005747 .0028801 2.00 0.045 1.000118 1.011408

sp77\_1605\_pp\_c\_lag\_all | 1.000052 .0000308 1.70 0.089 .999992 1.000113

sp77\_1606\_pp\_c\_lag\_all | .9999683 .000038 -0.84 0.403 .9998938 1.000043

sp77\_1710\_pp\_c\_lag\_all | 1.000044 .0000914 0.48 0.631 .9998647 1.000223

sp77\_1802\_pp\_c\_lag\_all | 1.000248 .0012097 0.21 0.838 .9978799 1.002622

sp77\_1906\_pp\_c\_lag\_all | 1.002673 .0011895 2.25 0.024 1.000344 1.005007

sp77\_1915\_pp\_c\_lag\_all | .9996273 .0004255 -0.88 0.381 .9987937 1.000462

sp77\_1916\_pp\_c\_lag\_all | .9996771 .0005532 -0.58 0.559 .9985933 1.000762

sp77\_200\_pp\_c\_lag\_all | 1.000012 .0000364 0.34 0.731 .9999412 1.000084

sp77\_202\_pp\_c\_lag\_all | .9998749 .0000504 -2.48 0.013 .9997761 .9999738

sp77\_203\_pp\_c\_lag\_all | .9996985 .0003507 -0.86 0.390 .9990114 1.000386

sp77\_204\_pp\_c\_lag\_all | .9999818 .0000913 -0.20 0.842 .9998028 1.000161

sp77\_205\_pp\_c\_lag\_all | 1.000021 .0000264 0.78 0.433 .9999689 1.000073

sp77\_206\_pp\_c\_lag\_all | 1.000105 .0001579 0.66 0.506 .9997955 1.000415

sp77\_207\_pp\_c\_lag\_all | 1.000125 .0001211 1.03 0.304 .9998873 1.000362

sp77\_208\_pp\_c\_lag\_all | 1.000113 .0000471 2.39 0.017 1.00002 1.000205

sp77\_210\_pp\_c\_lag\_all | 1.0008 .0002192 3.65 0.000 1.00037 1.00123

sp77\_216\_pp\_c\_lag\_all | 1.000021 .0001194 0.17 0.862 .9997867 1.000255

sp77\_305\_pp\_c\_lag\_all | .9961464 .0022766 -1.69 0.091 .9916944 1.000618

sp77\_309\_pp\_c\_lag\_all | .9936435 .002073 -3.06 0.002 .9895889 .9977148

sp77\_314\_pp\_c\_lag\_all | 1.002691 .0028986 0.93 0.353 .9970261 1.008388

sp77\_315\_pp\_c\_lag\_all | .9982964 .0019007 -0.90 0.370 .9945781 1.002029

sp77\_400\_pp\_c\_lag\_all | .9999989 .000033 -0.03 0.974 .9999342 1.000064

sp77\_401\_pp\_c\_lag\_all | 1.000034 .0001646 0.20 0.838 .9997111 1.000356

sp77\_402\_pp\_c\_lag\_all | .9997596 .0001844 -1.30 0.192 .9993983 1.000121

sp77\_403\_1\_pp\_c\_lag\_all | .9999241 .0003022 -0.25 0.802 .999332 1.000517

sp77\_403\_2\_pp\_c\_lag\_all | .9988015 .0031832 -0.38 0.707 .9925819 1.00506

sp77\_403\_pp\_c\_lag\_all | .9995824 .0006089 -0.69 0.493 .9983896 1.000777

sp77\_404\_pp\_c\_lag\_all | .9999648 .0000234 -1.50 0.133 .9999189 1.000011

sp77\_405\_pp\_c\_lag\_all | .9990694 .0002623 -3.55 0.000 .9985554 .9995836

sp77\_408\_pp\_c\_lag\_all | 1.000722 .0003301 2.19 0.029 1.000075 1.001369

sp77\_409\_pp\_c\_lag\_all | .9998073 .0008232 -0.23 0.815 .9981951 1.001422

sp77\_410\_pp\_c\_lag\_all | 1.000016 .0000539 0.30 0.762 .9999108 1.000122

sp77\_411\_pp\_c\_lag\_all | .9973184 .0007276 -3.68 0.000 .9958933 .9987456

sp77\_412\_pp\_c\_lag\_all | .9997158 .0003116 -0.91 0.362 .9991053 1.000327

sp77\_413\_pp\_c\_lag\_all | 1.000766 .0015985 0.48 0.632 .9976377 1.003904

sp77\_500\_pp\_c\_lag\_all | .9993175 .000452 -1.51 0.131 .9984319 1.000204

sp77\_501\_pp\_c\_lag\_all | 1.00007 .0003299 0.21 0.831 .9994241 1.000717

sp77\_502\_1\_pp\_c\_lag\_all | 1.000564 .0020815 0.27 0.787 .9964921 1.004652

sp77\_502\_2\_pp\_c\_lag\_all | 1.00033 .0002111 1.56 0.118 .9999163 1.000744

sp77\_502\_pp\_c\_lag\_all | .9999552 .0000264 -1.70 0.089 .9999035 1.000007

sp77\_503\_1\_pp\_c\_lag\_all | .9987469 .00072 -1.74 0.082 .9973367 1.000159

sp77\_503\_pp\_c\_lag\_all | .9996649 .00051 -0.66 0.511 .9986658 1.000665

sp77\_504\_pp\_c\_lag\_all | .9999659 .0001231 -0.28 0.782 .9997246 1.000207

sp77\_505\_pp\_c\_lag\_all | .9998329 .0000642 -2.60 0.009 .999707 .9999587

sp77\_506\_1\_pp\_c\_lag\_all | 1.000116 .0000971 1.20 0.231 .999926 1.000307

sp77\_506\_pp\_c\_lag\_all | .9999832 .0001046 -0.16 0.873 .9997783 1.000188

sp77\_507\_pp\_c\_lag\_all | 1.000004 .0003215 0.01 0.991 .9993738 1.000634

sp77\_508\_1\_pp\_c\_lag\_all | 1.001512 .0004658 3.25 0.001 1.0006 1.002425

sp77\_508\_pp\_c\_lag\_all | .9998766 .0003711 -0.33 0.739 .9991495 1.000604

sp77\_509\_pp\_c\_lag\_all | 1.000008 .0001599 0.05 0.962 .9996943 1.000321

sp77\_510\_pp\_c\_lag\_all | .9984293 .0012561 -1.25 0.211 .9959704 1.000894

sp77\_511\_pp\_c\_lag\_all | .9998193 .0005554 -0.33 0.745 .9987314 1.000908

sp77\_512\_pp\_c\_lag\_all | .9999697 .0000587 -0.52 0.605 .9998546 1.000085

sp77\_513\_pp\_c\_lag\_all | 1.000166 .0000967 1.72 0.086 .9999764 1.000356

sp77\_514\_pp\_c\_lag\_all | .9994188 .000955 -0.61 0.543 .9975488 1.001292

sp77\_515\_pp\_c\_lag\_all | 1.002498 .0013707 1.82 0.068 .9998147 1.005188

sp77\_516\_pp\_c\_lag\_all | .9999973 .0000377 -0.07 0.943 .9999234 1.000071

sp77\_600\_pp\_c\_lag\_all | .9994152 .0004674 -1.25 0.211 .9984995 1.000332

sp77\_601\_pp\_c\_lag\_all | .9999214 .0004904 -0.16 0.873 .9989608 1.000883

sp77\_602\_pp\_c\_lag\_all | 1.002243 .0010012 2.24 0.025 1.000282 1.004207

sp77\_603\_pp\_c\_lag\_all | 1.001212 .0006812 1.78 0.075 .9998774 1.002548

sp77\_604\_pp\_c\_lag\_all | .9997128 .0004221 -0.68 0.496 .9988858 1.00054

sp77\_605\_pp\_c\_lag\_all | .9970395 .0013143 -2.25 0.024 .9944668 .9996188

sp77\_606\_1\_pp\_c\_lag\_all | 1.000131 .0021592 0.06 0.952 .9959082 1.004372

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

sp77\_700\_1\_pp\_c\_lag\_all | .9996042 .0007548 -0.52 0.600 .998126 1.001085

sp77\_700\_pp\_c\_lag\_all | 1.000793 .0003477 2.28 0.023 1.000111 1.001474

sp77\_701\_1\_pp\_c\_lag\_all | 1.000924 .000449 2.06 0.039 1.000045 1.001805

sp77\_701\_2\_pp\_c\_lag\_all | .9995104 .0003686 -1.33 0.184 .9987883 1.000233

sp77\_701\_pp\_c\_lag\_all | .999975 .000102 -0.24 0.807 .9997752 1.000175

sp75\_804\_pp\_c\_lag\_all | .9998544 .0001122 -1.30 0.194 .9996346 1.000074

sp75\_805\_pp\_c\_lag\_all | 1.000162 .0003534 0.46 0.646 .9994696 1.000855

sp75\_806\_pp\_c\_lag\_all | 1.005106 .002965 1.73 0.084 .9993113 1.010934

sp75\_807\_pp\_c\_lag\_all | 1.000062 .0000301 2.04 0.041 1.000003 1.000121

sp75\_808\_pp\_c\_lag\_all | 1.000163 .0002867 0.57 0.571 .9996009 1.000725

sp75\_809\_pp\_c\_lag\_all | 1.000192 .0001533 1.25 0.211 .9998911 1.000492

sp75\_810\_pp\_c\_lag\_all | 1.000105 .0001683 0.62 0.534 .9997748 1.000435

sp75\_811\_pp\_c\_lag\_all | 1.00015 .0001514 0.99 0.321 .9998534 1.000447

sp77\_703\_pp\_c\_lag\_all | .9958124 .0014738 -2.84 0.005 .992928 .9987052

sp77\_704\_1\_pp\_c\_lag\_all | 1.000608 .0004368 1.39 0.164 .9997523 1.001465

sp77\_704\_8\_pp\_c\_lag\_all | .9992065 .0006358 -1.25 0.212 .9979611 1.000453

sp77\_704\_9\_pp\_c\_lag\_all | .996075 .0009173 -4.27 0.000 .9942788 .9978746

sp77\_704\_pp\_c\_lag\_all | 1.001154 .0009021 1.28 0.201 .9993872 1.002924

sp77\_705\_pp\_c\_lag\_all | .9999144 .0001955 -0.44 0.661 .9995314 1.000298

sp77\_800\_1\_pp\_c\_lag\_all | 1.001546 .0005534 2.80 0.005 1.000462 1.002631

sp77\_800\_2\_pp\_c\_lag\_all | .9995582 .0004473 -0.99 0.323 .9986819 1.000435

sp77\_800\_pp\_c\_lag\_all | .9993984 .0006423 -0.94 0.349 .9981402 1.000658

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

sp77\_802\_pp\_c\_lag\_all | .9996833 .0007991 -0.40 0.692 .9981184 1.001251

sp77\_803\_pp\_c\_lag\_all | 1.001884 .0005633 3.35 0.001 1.00078 1.002988

sp77\_804\_pp\_c\_lag\_all | .9953494 .0008007 -5.79 0.000 .9937813 .9969199

sp77\_805\_pp\_c\_lag\_all | .996095 .0009487 -4.11 0.000 .9942373 .9979561

sp77\_807\_1\_pp\_c\_lag\_all | .9992653 .0007883 -0.93 0.352 .9977215 1.000812

sp77\_807\_2\_pp\_c\_lag\_all | 1.001221 .0005429 2.25 0.024 1.000157 1.002286

sp77\_807\_3\_pp\_c\_lag\_all | 1.000868 .0006273 1.38 0.166 .9996389 1.002098

sp77\_807\_pp\_c\_lag\_all | .9998978 .0005022 -0.20 0.839 .998914 1.000883

sp77\_808\_pp\_c\_lag\_all | 1.001664 .0007598 2.19 0.028 1.000176 1.003154

sp77\_809\_pp\_c\_lag\_all | 1.000002 .0002441 0.01 0.994 .9995234 1.00048

sp77\_810\_pp\_c\_lag\_all | 1.000252 .000501 0.50 0.615 .9992704 1.001234

sp77\_900\_1\_pp\_c\_lag\_all | 1.00121 .0007096 1.71 0.088 .9998201 1.002602

sp77\_900\_2\_pp\_c\_lag\_all | 1.000341 .0003537 0.96 0.335 .9996479 1.001034

sp77\_900\_pp\_c\_lag\_all | .9998314 .0003571 -0.47 0.637 .9991318 1.000531

sp77\_901\_1\_pp\_c\_lag\_all | .9961733 .0014011 -2.73 0.006 .9934309 .9989232

sp77\_901\_pp\_c\_lag\_all | 1.000324 .0004096 0.79 0.429 .9995214 1.001127

sp77\_902\_pp\_c\_lag\_all | .9989593 .000517 -2.01 0.044 .9979464 .9999731

sp77\_903\_pp\_c\_lag\_all | 1.00085 .0006752 1.26 0.208 .9995278 1.002174

sp77\_904\_pp\_c\_lag\_all | .9999832 .0001379 -0.12 0.903 .9997129 1.000254

mine\_time | 1.002149 .0093972 0.23 0.819 .9838988 1.020737

onsite\_insp\_hours | 1.000031 .0000527 0.59 0.557 .9999277 1.000134

|

state |

1 | 1.25415 .2758083 1.03 0.303 .8149976 1.929936

2 | 1.731164 .1380142 6.88 0.000 1.480736 2.023946

3 | .9244238 .158851 -0.46 0.647 .660089 1.294612

4 | .9913348 .1531575 -0.06 0.955 .7323403 1.341924

5 | .692192 .1187471 -2.14 0.032 .4945395 .9688402

6 | .8495231 .0530249 -2.61 0.009 .7517017 .9600742

7 | .8659202 .2099597 -0.59 0.553 .5383776 1.392736

8 | .7998958 .1864791 -0.96 0.338 .5065163 1.263204

9 | 1.055106 .706455 0.08 0.936 .2840316 3.919451

10 | .6591666 .1393024 -1.97 0.049 .4356221 .9974257

11 | 1.198946 .4913524 0.44 0.658 .536982 2.676944

12 | 1.036609 .1048056 0.36 0.722 .8502656 1.26379

13 | 1.285615 .2273417 1.42 0.155 .909052 1.818164

14 | .7016159 .0903631 -2.75 0.006 .5450933 .9030837

15 | .6681455 .0524194 -5.14 0.000 .5729148 .7792057

17 | .7405186 .3756033 -0.59 0.554 .2740264 2.001149

|

time |

2000 | 1.05582 .0710203 0.81 0.419 .9254086 1.20461

2002 | .915786 .0610308 -1.32 0.187 .8036507 1.043568

2003 | .865064 .0674655 -1.86 0.063 .7424443 1.007935

2004 | .8039942 .0603087 -2.91 0.004 .6940697 .9313281

2005 | .7117663 .0532679 -4.54 0.000 .6146592 .8242149

2006 | .7235686 .0573931 -4.08 0.000 .6193881 .8452721

2007 | .6438878 .0509256 -5.57 0.000 .5514269 .7518522

2008 | .573795 .0483481 -6.59 0.000 .4864456 .6768294

2009 | .4563432 .0410221 -8.73 0.000 .382626 .544263

2010 | .4995172 .0457697 -7.58 0.000 .4174041 .597784

2011 | .5335633 .048554 -6.90 0.000 .4464029 .6377419

2012 | .5405193 .0516469 -6.44 0.000 .4482068 .6518445

2013 | .4403716 .0455112 -7.94 0.000 .3596251 .5392482

2014 | .4006347 .0453019 -8.09 0.000 .3209953 .5000328

2015 | .4298602 .0516203 -7.03 0.000 .3397111 .5439322

|

\_cons | .0000177 1.26e-06 -154.00 0.000 .0000154 .0000203

ln(hours) | 1 (exposure)

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

**. eststo: nbreg MR `subpart\_pp\_lag\_all\_vars' `covariates' ib(freq).state ib(freq).time if sample\_pp == 1, vce(cl mineid) exposure(hours) iter(50) irr**

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

note: sp48\_4\_pp\_c\_lag\_all omitted because of collinearity

note: sp75\_1721\_pp\_c\_lag\_all omitted because of collinearity

note: sp75\_1727\_pp\_c\_lag\_all omitted because of collinearity

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

note: sp75\_800\_2\_pp\_c\_lag\_all omitted because of collinearity

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

note: sp77\_413\_pp\_c\_lag\_all omitted because of collinearity

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

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

note: sp77\_804\_pp\_c\_lag\_all omitted because of collinearity

Fitting Poisson model:

Iteration 0: log pseudolikelihood = -39265.153

Iteration 1: log pseudolikelihood = -25103.329 (backed up)

Iteration 2: log pseudolikelihood = -12680.186

Iteration 3: log pseudolikelihood = -7699.2544

Iteration 4: log pseudolikelihood = -4655.5511

Iteration 5: log pseudolikelihood = -4294.9333

Iteration 6: log pseudolikelihood = -4234.7083

Iteration 7: log pseudolikelihood = -4231.7911

Iteration 8: log pseudolikelihood = -4231.7705

Iteration 9: log pseudolikelihood = -4231.7705

Fitting constant-only model:

Iteration 0: log pseudolikelihood = -4833.1956

Iteration 1: log pseudolikelihood = -4642.8135

Iteration 2: log pseudolikelihood = -4639.576

Iteration 3: log pseudolikelihood = -4639.57

Iteration 4: log pseudolikelihood = -4639.57

Fitting full model:

Iteration 0: log pseudolikelihood = -4349.7092

Iteration 1: log pseudolikelihood = -4263.2505

Iteration 2: log pseudolikelihood = -4240.5146

Iteration 3: log pseudolikelihood = -4234.1836

Iteration 4: log pseudolikelihood = -4232.5256

Iteration 5: log pseudolikelihood = -4231.9702

Iteration 6: log pseudolikelihood = -4231.8254

Iteration 7: log pseudolikelihood = -4231.7808

Iteration 8: log pseudolikelihood = -4231.7718

Iteration 9: log pseudolikelihood = -4231.7708

Iteration 10: log pseudolikelihood = -4231.7705

Iteration 11: log pseudolikelihood = -4231.7705

Iteration 12: log pseudolikelihood = -4231.7705

Iteration 13: log pseudolikelihood = -4231.7705 (not concave)

Iteration 14: log pseudolikelihood = -4231.7705 (not concave)

Iteration 15: log pseudolikelihood = -4231.7704

Iteration 16: log pseudolikelihood = -4231.7704 (backed up)

Negative binomial regression Number of obs = 3,333

Wald chi2(300) = .

Dispersion = mean Prob > chi2 = .

Log pseudolikelihood = -4231.7704 Pseudo R2 = 0.0879

(Std. Err. adjusted for 727 clusters in mineid)

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| Robust

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

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

sp47\_41\_pp\_c\_lag\_all | 1.000073 .0001581 0.46 0.645 .9997631 1.000383

sp47\_42\_pp\_c\_lag\_all | .9990491 .000551 -1.73 0.085 .9979697 1.00013

sp47\_44\_pp\_c\_lag\_all | 1.000066 .0002303 0.29 0.775 .9996145 1.000517

sp48\_11\_pp\_c\_lag\_all | .9998842 .0001767 -0.66 0.512 .999538 1.000231

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

sp48\_25\_pp\_c\_lag\_all | .9997349 .0002557 -1.04 0.300 .9992339 1.000236

sp48\_26\_pp\_c\_lag\_all | 1.000276 .0003522 0.78 0.433 .9995863 1.000967

sp48\_27\_pp\_c\_lag\_all | 1.000505 .0002313 2.19 0.029 1.000052 1.000959

sp48\_28\_pp\_c\_lag\_all | .998516 .0003358 -4.42 0.000 .997858 .9991744

sp48\_4\_pp\_c\_lag\_all | 1 (omitted)

sp48\_5\_pp\_c\_lag\_all | .9998345 .0003962 -0.42 0.676 .9990583 1.000611

sp48\_6\_pp\_c\_lag\_all | 1.000045 .0001566 0.29 0.775 .9997379 1.000352

sp48\_7\_pp\_c\_lag\_all | 1.000589 .0001647 3.58 0.000 1.000266 1.000912

sp48\_8\_pp\_c\_lag\_all | 1.000228 .0003191 0.71 0.475 .9996024 1.000853

sp71\_701\_pp\_c\_lag\_all | .9990126 .0014673 -0.67 0.501 .9961409 1.001893

sp72\_503\_pp\_c\_lag\_all | .9999461 .0001983 -0.27 0.786 .9995576 1.000335

sp72\_610\_pp\_c\_lag\_all | .9947728 .0020053 -2.60 0.009 .9908502 .998711

sp72\_620\_pp\_c\_lag\_all | 1.001365 .001124 1.21 0.224 .999164 1.00357

sp72\_630\_pp\_c\_lag\_all | 1.00001 .0000234 0.41 0.684 .9999636 1.000055

sp75\_100\_pp\_c\_lag\_all | .9995475 .0006836 -0.66 0.508 .9982085 1.000888

sp75\_1001\_1\_pp\_c\_lag\_all | .9979114 .0012166 -1.71 0.086 .9955297 1.000299

sp75\_1001\_pp\_c\_lag\_all | 1.006222 .0016127 3.87 0.000 1.003066 1.009388

sp75\_1003\_1\_pp\_c\_lag\_all | .9968688 .0008251 -3.79 0.000 .995253 .9984873

sp75\_1100\_2\_pp\_c\_lag\_all | 1.000035 .0000229 1.54 0.124 .9999903 1.00008

sp75\_1101\_20\_pp\_c\_lag\_all | .9997138 .0004219 -0.68 0.498 .9988873 1.000541

sp75\_1102\_pp\_c\_lag\_all | .9999656 .0002657 -0.13 0.897 .9994449 1.000487

sp75\_1103\_4\_pp\_c\_lag\_all | .9999907 .0000411 -0.23 0.821 .9999102 1.000071

sp75\_1104\_pp\_c\_lag\_all | .9998492 .0001098 -1.37 0.170 .999634 1.000064

sp75\_1106\_2\_pp\_c\_lag\_all | .9998087 .0001423 -1.34 0.179 .9995299 1.000088

sp75\_1106\_3\_pp\_c\_lag\_all | 1.00002 .0000425 0.48 0.633 .999937 1.000104

sp75\_1106\_4\_pp\_c\_lag\_all | 1.000114 .0004155 0.27 0.784 .9993 1.000929

sp75\_1106\_5\_pp\_c\_lag\_all | .9997939 .0001304 -1.58 0.114 .9995385 1.000049

sp75\_1106\_6\_pp\_c\_lag\_all | 1.012051 .0041242 2.94 0.003 1.004 1.020166

sp75\_1106\_pp\_c\_lag\_all | .9999923 .0003364 -0.02 0.982 .9993332 1.000652

sp75\_1107\_14\_pp\_c\_lag\_all | 1.002615 .0011181 2.34 0.019 1.000426 1.004809

sp75\_1400\_1\_pp\_c\_lag\_all | .9996441 .0006805 -0.52 0.601 .9983111 1.000979

sp75\_1400\_2\_pp\_c\_lag\_all | .9999822 .0013247 -0.01 0.989 .9973891 1.002582

sp75\_1400\_3\_pp\_c\_lag\_all | .9996477 .0002052 -1.72 0.086 .9992457 1.00005

sp75\_1400\_4\_pp\_c\_lag\_all | .9997367 .0005191 -0.51 0.612 .9987199 1.000755

sp75\_1400\_pp\_c\_lag\_all | 1.000506 .0002484 2.04 0.042 1.000019 1.000993

sp75\_1401\_1\_pp\_c\_lag\_all | .9980506 .0027956 -0.70 0.486 .9925864 1.003545

sp75\_1401\_pp\_c\_lag\_all | 1.000838 .0015031 0.56 0.577 .9978965 1.003789

sp75\_1403\_10\_pp\_c\_lag\_all | 1.000142 .0000532 2.68 0.007 1.000038 1.000246

sp75\_1403\_11\_pp\_c\_lag\_all | 1.000742 .0010789 0.69 0.492 .9986293 1.002858

sp75\_1403\_3\_pp\_c\_lag\_all | .9933935 .0018299 -3.60 0.000 .9898135 .9969866

sp75\_1403\_4\_pp\_c\_lag\_all | 1.003767 .0020699 1.82 0.068 .9997184 1.007832

sp75\_1403\_5\_pp\_c\_lag\_all | 1.000002 .0000292 0.08 0.937 .9999451 1.000059

sp75\_1403\_6\_pp\_c\_lag\_all | .9999837 .0000237 -0.69 0.491 .9999373 1.00003

sp75\_1403\_7\_pp\_c\_lag\_all | .9999614 .0001551 -0.25 0.803 .9996574 1.000265

sp75\_1403\_8\_pp\_c\_lag\_all | 1.000057 .0000393 1.45 0.148 .9999798 1.000134

sp75\_1403\_9\_pp\_c\_lag\_all | 1.000149 .0002199 0.68 0.497 .9997184 1.00058

sp75\_1404\_1\_pp\_c\_lag\_all | .9972076 .001987 -1.40 0.161 .9933208 1.00111

sp75\_1404\_pp\_c\_lag\_all | .9988782 .0009853 -1.14 0.255 .9969489 1.000811

sp75\_1405\_1\_pp\_c\_lag\_all | .9985534 .0007985 -1.81 0.070 .9969897 1.00012

sp75\_1405\_pp\_c\_lag\_all | .9998946 .0000576 -1.83 0.067 .9997818 1.000007

sp75\_1431\_pp\_c\_lag\_all | .9958268 .0082225 -0.51 0.613 .9798407 1.012074

sp75\_1432\_pp\_c\_lag\_all | 1.000328 .0003861 0.85 0.395 .9995718 1.001085

sp75\_1433\_pp\_c\_lag\_all | .9996847 .0003222 -0.98 0.328 .9990535 1.000316

sp75\_1434\_pp\_c\_lag\_all | 1.000301 .0003148 0.96 0.339 .9996842 1.000918

sp75\_1435\_pp\_c\_lag\_all | 1.002376 .0018596 1.28 0.201 .9987376 1.006027

sp75\_1437\_pp\_c\_lag\_all | .9988496 .0009413 -1.22 0.222 .9970065 1.000696

sp75\_150\_pp\_c\_lag\_all | .999632 .0005569 -0.66 0.509 .9985412 1.000724

sp75\_151\_pp\_c\_lag\_all | 1.000437 .0008999 0.49 0.627 .998675 1.002202

sp75\_153\_pp\_c\_lag\_all | 1.002624 .0007894 3.33 0.001 1.001078 1.004172

sp75\_156\_pp\_c\_lag\_all | .9991932 .0009975 -0.81 0.419 .9972401 1.00115

sp75\_160\_pp\_c\_lag\_all | .9997058 .0015404 -0.19 0.849 .9966912 1.002729

sp75\_1600\_2\_pp\_c\_lag\_all | .9999982 .0000708 -0.03 0.979 .9998595 1.000137

sp75\_1712\_10\_pp\_c\_lag\_all | .9992522 .0002249 -3.32 0.001 .9988115 .9996932

sp75\_1712\_6\_pp\_c\_lag\_all | 1.000139 .0001569 0.88 0.377 .9998311 1.000446

sp75\_1720\_pp\_c\_lag\_all | .9996855 .0001293 -2.43 0.015 .9994322 .9999389

sp75\_1721\_pp\_c\_lag\_all | 1 (omitted)

sp75\_1725\_pp\_c\_lag\_all | 1.000011 9.38e-06 1.22 0.221 .9999931 1.00003

sp75\_1726\_pp\_c\_lag\_all | 1.000743 .0002762 2.69 0.007 1.000202 1.001285

sp75\_1727\_pp\_c\_lag\_all | 1 (omitted)

sp75\_1728\_pp\_c\_lag\_all | 1.000675 .0009466 0.71 0.475 .9988217 1.002532

sp75\_1729\_pp\_c\_lag\_all | .9992585 .0005361 -1.38 0.167 .9982084 1.00031

sp75\_1730\_pp\_c\_lag\_all | 1.000036 .0004133 0.09 0.930 .9992268 1.000847

sp75\_1731\_pp\_c\_lag\_all | 1.000012 5.78e-06 2.02 0.044 1 1.000023

sp75\_1903\_pp\_c\_lag\_all | 1.000271 .0001291 2.10 0.035 1.000018 1.000524

sp75\_1909\_pp\_c\_lag\_all | .9999558 .0000188 -2.35 0.019 .999919 .9999927

sp75\_1910\_pp\_c\_lag\_all | 1.000073 .0000328 2.23 0.026 1.000009 1.000137

sp75\_1911\_pp\_c\_lag\_all | .9999491 .0000394 -1.29 0.196 .999872 1.000026

sp75\_1912\_pp\_c\_lag\_all | 1.000057 .0003371 0.17 0.865 .9993969 1.000718

sp75\_1913\_pp\_c\_lag\_all | 1.000929 .0003786 2.46 0.014 1.000187 1.001672

sp75\_1914\_pp\_c\_lag\_all | .9999887 .0000213 -0.53 0.596 .999947 1.00003

sp75\_1915\_pp\_c\_lag\_all | .9999076 .0003914 -0.24 0.813 .9991407 1.000675

sp75\_202\_pp\_c\_lag\_all | .9999961 4.11e-06 -0.96 0.337 .999988 1.000004

sp75\_208\_pp\_c\_lag\_all | 1.000038 .0000487 0.77 0.439 .9999422 1.000133

sp75\_211\_pp\_c\_lag\_all | 1.000099 .0000476 2.08 0.037 1.000006 1.000193

sp75\_212\_pp\_c\_lag\_all | 1.000395 .0001169 3.38 0.001 1.000166 1.000624

sp75\_214\_pp\_c\_lag\_all | .9998957 .0001082 -0.96 0.335 .9996837 1.000108

sp75\_312\_pp\_c\_lag\_all | 1.000018 .000088 0.20 0.840 .9998453 1.00019

sp75\_320\_pp\_c\_lag\_all | .9999296 .0000549 -1.28 0.200 .999822 1.000037

sp75\_324\_pp\_c\_lag\_all | .9993089 .000231 -2.99 0.003 .9988563 .9997618

sp75\_337\_pp\_c\_lag\_all | 1.000181 .0001021 1.77 0.077 .9999807 1.000381

sp75\_340\_pp\_c\_lag\_all | .9999481 .0000311 -1.67 0.095 .9998871 1.000009

sp75\_341\_pp\_c\_lag\_all | .9979132 .0019182 -1.09 0.277 .9941607 1.00168

sp75\_342\_pp\_c\_lag\_all | 1.00001 .000017 0.59 0.558 .9999766 1.000043

sp75\_344\_pp\_c\_lag\_all | 1.000325 .0003206 1.01 0.311 .9996967 1.000954

sp75\_352\_pp\_c\_lag\_all | .9997539 .0002419 -1.02 0.309 .9992799 1.000228

sp75\_382\_pp\_c\_lag\_all | 1.000166 .0001896 0.88 0.381 .9997946 1.000538

sp75\_503\_pp\_c\_lag\_all | .9999849 6.99e-06 -2.15 0.031 .9999712 .9999987

sp75\_504\_pp\_c\_lag\_all | 1.000901 .0004208 2.14 0.032 1.000076 1.001726

sp75\_505\_pp\_c\_lag\_all | 1.000529 .0005522 0.96 0.338 .9994474 1.001612

sp75\_506\_1\_pp\_c\_lag\_all | 1.001509 .0002307 6.55 0.000 1.001057 1.001961

sp75\_506\_pp\_c\_lag\_all | .9994843 .0003339 -1.54 0.123 .9988301 1.000139

sp75\_507\_pp\_c\_lag\_all | .9997031 .0001534 -1.94 0.053 .9994025 1.000004

sp75\_511\_1\_pp\_c\_lag\_all | .9991842 .0023935 -0.34 0.733 .994504 1.003886

sp75\_511\_pp\_c\_lag\_all | .9999869 .0001712 -0.08 0.939 .9996514 1.000323

sp75\_512\_1\_pp\_c\_lag\_all | 1.0007 .0012834 0.55 0.585 .9981881 1.003219

sp75\_512\_2\_pp\_c\_lag\_all | 1.000102 .0000573 1.78 0.076 .9999895 1.000214

sp75\_512\_pp\_c\_lag\_all | 1.000011 .0000148 0.77 0.441 .9999824 1.00004

sp75\_513\_1\_pp\_c\_lag\_all | .9998039 .0006436 -0.30 0.761 .9985431 1.001066

sp75\_513\_pp\_c\_lag\_all | .9998848 .000224 -0.51 0.607 .9994458 1.000324

sp75\_514\_pp\_c\_lag\_all | .9999943 .0000509 -0.11 0.910 .9998946 1.000094

sp75\_515\_pp\_c\_lag\_all | .9999447 .0000339 -1.63 0.103 .9998783 1.000011

sp75\_516\_1\_pp\_c\_lag\_all | .9972991 .00081 -3.33 0.001 .9957129 .9988879

sp75\_516\_2\_pp\_c\_lag\_all | .9998699 .0000917 -1.42 0.156 .9996903 1.00005

sp75\_516\_pp\_c\_lag\_all | 1.00001 .0000505 0.20 0.842 .999911 1.000109

sp75\_517\_1\_pp\_c\_lag\_all | .9990309 .0009547 -1.01 0.310 .9971615 1.000904

sp75\_517\_pp\_c\_lag\_all | 1.000002 7.34e-06 0.27 0.785 .9999876 1.000016

sp75\_518\_1\_pp\_c\_lag\_all | .9998945 .0000824 -1.28 0.201 .9997331 1.000056

sp75\_518\_pp\_c\_lag\_all | .9999297 .0000475 -1.48 0.139 .9998366 1.000023

sp75\_519\_pp\_c\_lag\_all | .9917748 .0049467 -1.66 0.098 .9821268 1.001518

sp75\_520\_pp\_c\_lag\_all | 1.000147 .0001131 1.30 0.194 .9999252 1.000369

sp75\_523\_1\_pp\_c\_lag\_all | 1.000008 .0001331 0.06 0.953 .999747 1.000269

sp75\_523\_2\_pp\_c\_lag\_all | .999822 .0000919 -1.94 0.053 .9996418 1.000002

sp75\_523\_pp\_c\_lag\_all | .9999406 .0001062 -0.56 0.576 .9997325 1.000149

sp75\_600\_1\_pp\_c\_lag\_all | 1.000678 .0005856 1.16 0.247 .9995308 1.001826

sp75\_600\_pp\_c\_lag\_all | .9994495 .0009764 -0.56 0.573 .9975376 1.001365

sp75\_601\_1\_pp\_c\_lag\_all | .9999801 .0000444 -0.45 0.655 .999893 1.000067

sp75\_601\_2\_pp\_c\_lag\_all | .9995751 .0006237 -0.68 0.496 .9983534 1.000798

sp75\_601\_3\_pp\_c\_lag\_all | .9995587 .0008925 -0.49 0.621 .9978109 1.00131

sp75\_601\_pp\_c\_lag\_all | 1.000014 .0000613 0.23 0.816 .9998941 1.000134

sp75\_602\_pp\_c\_lag\_all | .9998609 .0001806 -0.77 0.441 .9995071 1.000215

sp75\_603\_pp\_c\_lag\_all | .9998916 .0001875 -0.58 0.563 .9995241 1.000259

sp75\_604\_pp\_c\_lag\_all | .9999853 .0000131 -1.12 0.262 .9999597 1.000011

sp75\_605\_pp\_c\_lag\_all | 1.000115 .0000637 1.80 0.071 .99999 1.00024

sp75\_606\_pp\_c\_lag\_all | .9999996 .0000224 -0.02 0.985 .9999556 1.000044

sp75\_607\_pp\_c\_lag\_all | .9997803 .0002113 -1.04 0.299 .9993663 1.000195

sp75\_700\_1\_pp\_c\_lag\_all | .9992837 .0006839 -1.05 0.295 .9979442 1.000625

sp75\_700\_pp\_c\_lag\_all | .9999861 .0002185 -0.06 0.949 .9995579 1.000414

sp75\_701\_1\_pp\_c\_lag\_all | 1.000269 .0002095 1.28 0.199 .9998586 1.00068

sp75\_701\_2\_pp\_c\_lag\_all | 1.00018 .0002557 0.70 0.482 .9996789 1.000681

sp75\_701\_3\_pp\_c\_lag\_all | .9998804 .0002638 -0.45 0.650 .9993635 1.000398

sp75\_701\_4\_pp\_c\_lag\_all | 1.001143 .0007432 1.54 0.124 .9996878 1.002601

sp75\_701\_pp\_c\_lag\_all | .9999909 .0000388 -0.23 0.815 .9999148 1.000067

sp75\_702\_1\_pp\_c\_lag\_all | .9978925 .0022406 -0.94 0.347 .9935106 1.002294

sp75\_702\_pp\_c\_lag\_all | 1.001761 .0008256 2.13 0.033 1.000144 1.00338

sp75\_703\_1\_pp\_c\_lag\_all | .9958717 .001239 -3.33 0.001 .9934464 .998303

sp75\_703\_2\_pp\_c\_lag\_all | 1.001256 .0024007 0.52 0.601 .9965616 1.005972

sp75\_703\_3\_pp\_c\_lag\_all | 1.000604 .0003007 2.01 0.044 1.000015 1.001193

sp75\_703\_4\_pp\_c\_lag\_all | 1.005515 .0014499 3.81 0.000 1.002677 1.008361

sp75\_703\_pp\_c\_lag\_all | 1.000019 .000105 0.18 0.855 .9998135 1.000225

sp75\_704\_pp\_c\_lag\_all | .9988319 .000605 -1.93 0.054 .9976467 1.000018

sp75\_705\_1\_pp\_c\_lag\_all | 1.000469 .0004681 1.00 0.316 .9995521 1.001387

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

sp75\_705\_8\_pp\_c\_lag\_all | .9933442 .0016745 -3.96 0.000 .9900675 .9966317

sp75\_705\_pp\_c\_lag\_all | .9984279 .0010072 -1.56 0.119 .9964557 1.000404

sp75\_706\_pp\_c\_lag\_all | .999625 .0003145 -1.19 0.233 .9990088 1.000242

sp75\_800\_2\_pp\_c\_lag\_all | 1 (omitted)

sp75\_800\_3\_pp\_c\_lag\_all | .9996391 .0003715 -0.97 0.331 .9989112 1.000367

sp75\_800\_4\_pp\_c\_lag\_all | .9992402 .0004091 -1.86 0.063 .9984387 1.000042

sp75\_800\_pp\_c\_lag\_all | 1.00026 .0002456 1.06 0.291 .9997783 1.000741

sp75\_801\_pp\_c\_lag\_all | .9996207 .0008189 -0.46 0.643 .998017 1.001227

sp75\_802\_pp\_c\_lag\_all | .9996817 .0005362 -0.59 0.553 .9986312 1.000733

sp75\_803\_2\_pp\_c\_lag\_all | .9979551 .0010869 -1.88 0.060 .9958271 1.000088

sp75\_803\_pp\_c\_lag\_all | 1.000861 .0002969 2.90 0.004 1.000279 1.001443

sp75\_812\_pp\_c\_lag\_all | .999861 .0004516 -0.31 0.758 .9989763 1.000746

sp75\_814\_pp\_c\_lag\_all | .9998613 .0004601 -0.30 0.763 .9989598 1.000764

sp75\_815\_pp\_c\_lag\_all | 1.000085 .0002305 0.37 0.711 .9996336 1.000537

sp75\_816\_pp\_c\_lag\_all | .999835 .0000851 -1.94 0.052 .9996683 1.000002

sp75\_818\_pp\_c\_lag\_all | 1.001312 .0007116 1.84 0.065 .999918 1.002707

sp75\_820\_pp\_c\_lag\_all | 1.00056 .0004544 1.23 0.217 .99967 1.001451

sp75\_821\_pp\_c\_lag\_all | 1.000566 .0002179 2.60 0.009 1.000139 1.000993

sp75\_825\_pp\_c\_lag\_all | 1.000318 .0003113 1.02 0.306 .9997085 1.000929

sp75\_827\_pp\_c\_lag\_all | .9997007 .0003789 -0.79 0.430 .9989583 1.000444

sp75\_831\_pp\_c\_lag\_all | 1.000573 .0008084 0.71 0.478 .9989899 1.002159

sp75\_832\_pp\_c\_lag\_all | 1.000313 .0016727 0.19 0.852 .9970396 1.003596

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

sp75\_900\_2\_pp\_c\_lag\_all | .9983679 .0009801 -1.66 0.096 .9964489 1.000291

sp75\_900\_3\_pp\_c\_lag\_all | .9999155 .0002105 -0.40 0.688 .9995031 1.000328

sp75\_900\_4\_pp\_c\_lag\_all | .9999116 .0000943 -0.94 0.349 .9997268 1.000096

sp75\_900\_pp\_c\_lag\_all | .9999668 .0000673 -0.49 0.622 .9998349 1.000099

sp75\_901\_pp\_c\_lag\_all | .9996722 .0002865 -1.14 0.253 .9991107 1.000234

sp75\_902\_1\_pp\_c\_lag\_all | .9983989 .001276 -1.25 0.210 .9959012 1.000903

sp75\_902\_2\_pp\_c\_lag\_all | 1.000002 .0001072 0.02 0.988 .9997916 1.000212

sp75\_902\_4\_pp\_c\_lag\_all | 1.000274 .0001847 1.48 0.138 .9999117 1.000636

sp75\_902\_pp\_c\_lag\_all | 1.000088 .0000632 1.39 0.164 .999964 1.000212

sp75\_903\_pp\_c\_lag\_all | 1.000233 .0001044 2.23 0.025 1.000029 1.000438

sp75\_904\_pp\_c\_lag\_all | .9999849 .0000254 -0.60 0.551 .9999352 1.000035

sp75\_905\_pp\_c\_lag\_all | .9986882 .0006856 -1.91 0.056 .9973453 1.000033

sp75\_907\_pp\_c\_lag\_all | 1.000004 .0001892 0.02 0.982 .9996335 1.000375

sp77\_103\_pp\_c\_lag\_all | 1.000267 .0004214 0.63 0.527 .9994409 1.001093

sp77\_104\_pp\_c\_lag\_all | .9994197 .0032247 -0.18 0.857 .9931192 1.00576

sp77\_1103\_pp\_c\_lag\_all | 1.000025 .0000693 0.35 0.723 .9998888 1.00016

sp77\_1104\_pp\_c\_lag\_all | .999969 .0000234 -1.32 0.185 .9999231 1.000015

sp77\_1106\_pp\_c\_lag\_all | .9975012 .0014089 -1.77 0.076 .9947437 1.000266

sp77\_1111\_pp\_c\_lag\_all | 1.001027 .0009573 1.07 0.283 .9991525 1.002905

sp77\_1112\_pp\_c\_lag\_all | 1.000612 .0002142 2.86 0.004 1.000193 1.001032

sp77\_1403\_pp\_c\_lag\_all | .9993017 .0005006 -1.39 0.163 .998321 1.000283

sp77\_1432\_pp\_c\_lag\_all | 1.000639 .0007676 0.83 0.405 .999136 1.002145

sp77\_1433\_pp\_c\_lag\_all | .9996999 .0008459 -0.35 0.723 .9980432 1.001359

sp77\_1434\_pp\_c\_lag\_all | .9993818 .000626 -0.99 0.324 .9981555 1.00061

sp77\_1437\_pp\_c\_lag\_all | .9991491 .0004217 -2.02 0.044 .998323 .9999758

sp77\_1438\_pp\_c\_lag\_all | .9858457 .0064933 -2.16 0.030 .9732008 .9986549

sp77\_1605\_pp\_c\_lag\_all | 1.000009 .0000313 0.29 0.771 .9999477 1.00007

sp77\_1606\_pp\_c\_lag\_all | 1.000038 .0000468 0.80 0.423 .9999457 1.000129

sp77\_1710\_pp\_c\_lag\_all | 1.000096 .0001022 0.94 0.346 .999896 1.000296

sp77\_1802\_pp\_c\_lag\_all | 1.004915 .0043861 1.12 0.261 .9963549 1.013548

sp77\_1906\_pp\_c\_lag\_all | 1.002158 .0011318 1.91 0.056 .9999423 1.004379

sp77\_1915\_pp\_c\_lag\_all | .9993496 .0004126 -1.58 0.115 .9985413 1.000159

sp77\_1916\_pp\_c\_lag\_all | .9996864 .0006991 -0.45 0.654 .9983171 1.001057

sp77\_200\_pp\_c\_lag\_all | 1.000012 .0000911 0.13 0.894 .9998336 1.000191

sp77\_202\_pp\_c\_lag\_all | .999915 .0000589 -1.44 0.149 .9997996 1.00003

sp77\_203\_pp\_c\_lag\_all | 1.000985 .0005231 1.88 0.060 .9999605 1.002011

sp77\_204\_pp\_c\_lag\_all | 1.000097 .0001364 0.71 0.477 .9998297 1.000364

sp77\_205\_pp\_c\_lag\_all | 1.000011 .000034 0.31 0.757 .9999439 1.000077

sp77\_206\_pp\_c\_lag\_all | 1.000333 .0001883 1.77 0.077 .9999636 1.000702

sp77\_207\_pp\_c\_lag\_all | .9999643 .0001385 -0.26 0.797 .9996929 1.000236

sp77\_208\_pp\_c\_lag\_all | 1.000163 .0000462 3.53 0.000 1.000073 1.000254

sp77\_210\_pp\_c\_lag\_all | 1.000664 .0002383 2.79 0.005 1.000197 1.001131

sp77\_216\_pp\_c\_lag\_all | .9999115 .0001222 -0.72 0.469 .9996722 1.000151

sp77\_305\_pp\_c\_lag\_all | .9967252 .0022279 -1.47 0.142 .9923682 1.001101

sp77\_309\_pp\_c\_lag\_all | .9989738 .002096 -0.49 0.625 .9948742 1.00309

sp77\_314\_pp\_c\_lag\_all | 1.004311 .0024004 1.80 0.072 .9996174 1.009027

sp77\_315\_pp\_c\_lag\_all | .9970957 .0020162 -1.44 0.150 .9931518 1.001055

sp77\_400\_pp\_c\_lag\_all | .9999259 .0000391 -1.89 0.058 .9998492 1.000003

sp77\_401\_pp\_c\_lag\_all | 1.00022 .0002256 0.97 0.330 .9997778 1.000662

sp77\_402\_pp\_c\_lag\_all | .9996759 .0001853 -1.75 0.080 .9993128 1.000039

sp77\_403\_1\_pp\_c\_lag\_all | .9997264 .0003176 -0.86 0.389 .9991041 1.000349

sp77\_403\_2\_pp\_c\_lag\_all | .9966589 .0046518 -0.72 0.473 .9875831 1.005818

sp77\_403\_pp\_c\_lag\_all | .9999699 .0006814 -0.04 0.965 .9986352 1.001306

sp77\_404\_pp\_c\_lag\_all | .9999751 .0000266 -0.94 0.348 .999923 1.000027

sp77\_405\_pp\_c\_lag\_all | .9994227 .0003329 -1.73 0.083 .9987705 1.000075

sp77\_408\_pp\_c\_lag\_all | 1.000579 .0004069 1.42 0.154 .999782 1.001377

sp77\_409\_pp\_c\_lag\_all | 1.000076 .0008313 0.09 0.927 .9984484 1.001707

sp77\_410\_pp\_c\_lag\_all | 1.000029 .000056 0.51 0.610 .9999189 1.000138

sp77\_411\_pp\_c\_lag\_all | .9973694 .0007347 -3.58 0.000 .9959305 .9988105

sp77\_412\_pp\_c\_lag\_all | .9995601 .0002551 -1.72 0.085 .9990603 1.00006

sp77\_413\_pp\_c\_lag\_all | 1 (omitted)

sp77\_500\_pp\_c\_lag\_all | 1.000017 .0004884 0.04 0.972 .9990606 1.000975

sp77\_501\_pp\_c\_lag\_all | .9998448 .0003611 -0.43 0.667 .9991373 1.000553

sp77\_502\_1\_pp\_c\_lag\_all | 1.002106 .0034775 0.61 0.544 .9953138 1.008945

sp77\_502\_2\_pp\_c\_lag\_all | 1.000461 .0002153 2.14 0.032 1.000039 1.000882

sp77\_502\_pp\_c\_lag\_all | 1.000025 .0000303 0.83 0.405 .9999659 1.000085

sp77\_503\_1\_pp\_c\_lag\_all | .9992444 .0007551 -1.00 0.317 .9977656 1.000725

sp77\_503\_pp\_c\_lag\_all | .9990789 .0005668 -1.62 0.104 .9979687 1.00019

sp77\_504\_pp\_c\_lag\_all | 1.000129 .0001361 0.95 0.343 .9998622 1.000396

sp77\_505\_pp\_c\_lag\_all | .9997746 .0000671 -3.36 0.001 .9996432 .9999061

sp77\_506\_1\_pp\_c\_lag\_all | 1.000035 .0000968 0.36 0.721 .9998449 1.000224

sp77\_506\_pp\_c\_lag\_all | 1.00002 .0001014 0.20 0.842 .9998215 1.000219

sp77\_507\_pp\_c\_lag\_all | .9998188 .0004414 -0.41 0.681 .998954 1.000684

sp77\_508\_1\_pp\_c\_lag\_all | 1.002216 .0004478 4.96 0.000 1.001339 1.003094

sp77\_508\_pp\_c\_lag\_all | .9992948 .0003499 -2.01 0.044 .9986094 .9999808

sp77\_509\_pp\_c\_lag\_all | 1.000054 .00019 0.28 0.776 .9996818 1.000427

sp77\_510\_pp\_c\_lag\_all | .9942493 .003014 -1.90 0.057 .9883595 1.000174

sp77\_511\_pp\_c\_lag\_all | .9997209 .0006431 -0.43 0.664 .9984613 1.000982

sp77\_512\_pp\_c\_lag\_all | .9998612 .0000622 -2.23 0.026 .9997393 .999983

sp77\_513\_pp\_c\_lag\_all | 1.000134 .0001075 1.25 0.212 .9999234 1.000345

sp77\_514\_pp\_c\_lag\_all | .9988847 .001064 -1.05 0.295 .9968015 1.000972

sp77\_515\_pp\_c\_lag\_all | 1.001324 .0017959 0.74 0.461 .99781 1.00485

sp77\_516\_pp\_c\_lag\_all | .9999438 .0000423 -1.33 0.184 .9998608 1.000027

sp77\_600\_pp\_c\_lag\_all | .9993767 .0006453 -0.97 0.334 .9981128 1.000642

sp77\_601\_pp\_c\_lag\_all | 1.000215 .0004622 0.47 0.642 .9993096 1.001121

sp77\_602\_pp\_c\_lag\_all | 1.004824 .0009676 5.00 0.000 1.002929 1.006722

sp77\_603\_pp\_c\_lag\_all | 1.000809 .0009024 0.90 0.370 .9990415 1.002579

sp77\_604\_pp\_c\_lag\_all | .9999269 .0003651 -0.20 0.841 .9992116 1.000643

sp77\_605\_pp\_c\_lag\_all | .9962322 .0019422 -1.94 0.053 .9924329 1.000046

sp77\_606\_1\_pp\_c\_lag\_all | .9983939 .0013748 -1.17 0.243 .9957029 1.001092

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

sp77\_700\_1\_pp\_c\_lag\_all | 1.000434 .0006627 0.66 0.512 .9991365 1.001734

sp77\_700\_pp\_c\_lag\_all | 1.000535 .0003967 1.35 0.177 .999758 1.001313

sp77\_701\_1\_pp\_c\_lag\_all | 1.000527 .0004764 1.11 0.269 .9995936 1.001461

sp77\_701\_2\_pp\_c\_lag\_all | .9994845 .0004884 -1.06 0.291 .9985277 1.000442

sp77\_701\_pp\_c\_lag\_all | 1.000041 .0001125 0.36 0.716 .9998205 1.000261

sp75\_804\_pp\_c\_lag\_all | 1.000191 .0003027 0.63 0.529 .9995975 1.000784

sp75\_805\_pp\_c\_lag\_all | 1.000735 .0003666 2.01 0.045 1.000017 1.001454

sp75\_806\_pp\_c\_lag\_all | 1.009892 .004532 2.19 0.028 1.001049 1.018814

sp75\_807\_pp\_c\_lag\_all | 1.000089 .0000309 2.87 0.004 1.000028 1.000149

sp75\_808\_pp\_c\_lag\_all | .9997635 .0002907 -0.81 0.416 .9991939 1.000333

sp75\_809\_pp\_c\_lag\_all | 1.000123 .0001438 0.85 0.394 .9998408 1.000404

sp75\_810\_pp\_c\_lag\_all | 1.000021 .0001584 0.13 0.897 .99971 1.000331

sp75\_811\_pp\_c\_lag\_all | 1.000316 .000121 2.61 0.009 1.000079 1.000553

sp77\_703\_pp\_c\_lag\_all | .9974637 .0010712 -2.36 0.018 .9953664 .9995654

sp77\_704\_1\_pp\_c\_lag\_all | 1.000993 .0004929 2.02 0.044 1.000027 1.001959

sp77\_704\_8\_pp\_c\_lag\_all | .9992377 .0005442 -1.40 0.161 .9981716 1.000305

sp77\_704\_9\_pp\_c\_lag\_all | .9942441 .0011226 -5.11 0.000 .9920463 .9964468

sp77\_704\_pp\_c\_lag\_all | 1.001148 .0010054 1.14 0.253 .9991793 1.003121

sp77\_705\_pp\_c\_lag\_all | .9999136 .0002138 -0.40 0.686 .9994946 1.000333

sp77\_800\_1\_pp\_c\_lag\_all | 1.002275 .0005119 4.45 0.000 1.001272 1.003278

sp77\_800\_2\_pp\_c\_lag\_all | .9998429 .0004158 -0.38 0.706 .9990284 1.000658

sp77\_800\_pp\_c\_lag\_all | .9987287 .0004734 -2.68 0.007 .9978013 .999657

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

sp77\_802\_pp\_c\_lag\_all | .9995308 .0006216 -0.75 0.450 .9983133 1.00075

sp77\_803\_pp\_c\_lag\_all | 1.002361 .0006584 3.59 0.000 1.001071 1.003652

sp77\_804\_pp\_c\_lag\_all | 1 (omitted)

sp77\_805\_pp\_c\_lag\_all | .9978238 .0009861 -2.20 0.028 .9958929 .9997585

sp77\_807\_1\_pp\_c\_lag\_all | .9998457 .0009756 -0.16 0.874 .9979353 1.00176

sp77\_807\_2\_pp\_c\_lag\_all | 1.001451 .0004789 3.03 0.002 1.000513 1.00239

sp77\_807\_3\_pp\_c\_lag\_all | 1.001139 .0006621 1.72 0.085 .9998426 1.002438

sp77\_807\_pp\_c\_lag\_all | 1.000708 .0007127 0.99 0.320 .9993123 1.002106

sp77\_808\_pp\_c\_lag\_all | .9981055 .0009667 -1.96 0.050 .9962127 1.000002

sp77\_809\_pp\_c\_lag\_all | .9996414 .0003149 -1.14 0.255 .9990243 1.000259

sp77\_810\_pp\_c\_lag\_all | 1.000279 .0006263 0.45 0.656 .9990519 1.001507

sp77\_900\_1\_pp\_c\_lag\_all | 1.000667 .0009466 0.71 0.481 .9988139 1.002524

sp77\_900\_2\_pp\_c\_lag\_all | 1.000706 .0004714 1.50 0.134 .9997824 1.00163

sp77\_900\_pp\_c\_lag\_all | 1.000341 .0004352 0.78 0.434 .9994881 1.001194

sp77\_901\_1\_pp\_c\_lag\_all | .9942262 .0014483 -3.98 0.000 .9913917 .9970688

sp77\_901\_pp\_c\_lag\_all | .9994409 .0005373 -1.04 0.298 .9983885 1.000495

sp77\_902\_pp\_c\_lag\_all | .9991714 .0005253 -1.58 0.115 .9981423 1.000202

sp77\_903\_pp\_c\_lag\_all | 1.000498 .0006213 0.80 0.422 .9992813 1.001717

sp77\_904\_pp\_c\_lag\_all | .9997598 .0001368 -1.76 0.079 .9994917 1.000028

mine\_time | .99855 .0109107 -0.13 0.894 .9773927 1.020165

onsite\_insp\_hours | .99999 .0000456 -0.22 0.826 .9999006 1.000079

|

state |

1 | 2.043738 .5747976 2.54 0.011 1.177677 3.546697

2 | 2.590396 .2638313 9.35 0.000 2.121638 3.162721

3 | .9904848 .2882966 -0.03 0.974 .559876 1.752281

4 | 1.270541 .1906641 1.60 0.111 .9467881 1.705

5 | .7842691 .1391333 -1.37 0.171 .5539336 1.110382

6 | 1.06208 .0888432 0.72 0.472 .9014757 1.251297

7 | 1.406659 .3405094 1.41 0.159 .8752635 2.260679

8 | .235046 .0786174 -4.33 0.000 .1220242 .4527514

9 | .9145627 .5792421 -0.14 0.888 .2643026 3.164649

10 | .6722403 .1253165 -2.13 0.033 .4664948 .9687289

11 | 1.974989 1.000171 1.34 0.179 .7319818 5.328796

12 | 1.058976 .1526691 0.40 0.691 .7983094 1.404757

13 | 1.057734 .1900722 0.31 0.755 .7437338 1.504303

14 | .7538797 .1808147 -1.18 0.239 .4711348 1.20631

15 | .7680206 .0761009 -2.66 0.008 .6324553 .9326442

17 | .6092029 .3566338 -0.85 0.397 .1934014 1.918953

|

time |

2007 | 1.110818 .0685523 1.70 0.089 .9842656 1.253641

2009 | .9146349 .0546759 -1.49 0.136 .8135119 1.028328

2010 | .8710086 .0605553 -1.99 0.047 .7600536 .9981613

2011 | .8969284 .0612602 -1.59 0.111 .7845501 1.025404

2012 | .8822758 .0670124 -1.65 0.099 .7602426 1.023898

2013 | .7802876 .0664926 -2.91 0.004 .6602663 .9221261

2014 | .6861654 .0684598 -3.77 0.000 .5642911 .834362

2015 | .6806402 .0777043 -3.37 0.001 .5441784 .8513219

|

\_cons | .00001 8.70e-07 -132.36 0.000 8.44e-06 .0000119

ln(hours) | 1 (exposure)

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

/lnalpha | -16.99304 .3428646 -17.66504 -16.32103

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

alpha | 4.17e-08 1.43e-08 2.13e-08 8.16e-08

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

(est1 stored)

**. lrtest pois nbin, stats force**

Likelihood-ratio test LR chi2(1) = 8382.02

(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 | 6,253 -9569.622 -8422.782 301 17447.56 19476.55

nbin | 3,333 -4639.57 -4231.77 302 9067.541 10913.25

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

Note: N=Obs used in calculating BIC; see [R] BIC note.

**. summ MR spcpp4\_yhat**

Variable | Obs Mean Std. Dev. Min Max

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

MR | 6,253 1.881017 3.268911 0 37

spcpp4\_yhat | 6,253 1.888165 2.951675 .0005374 44.66607