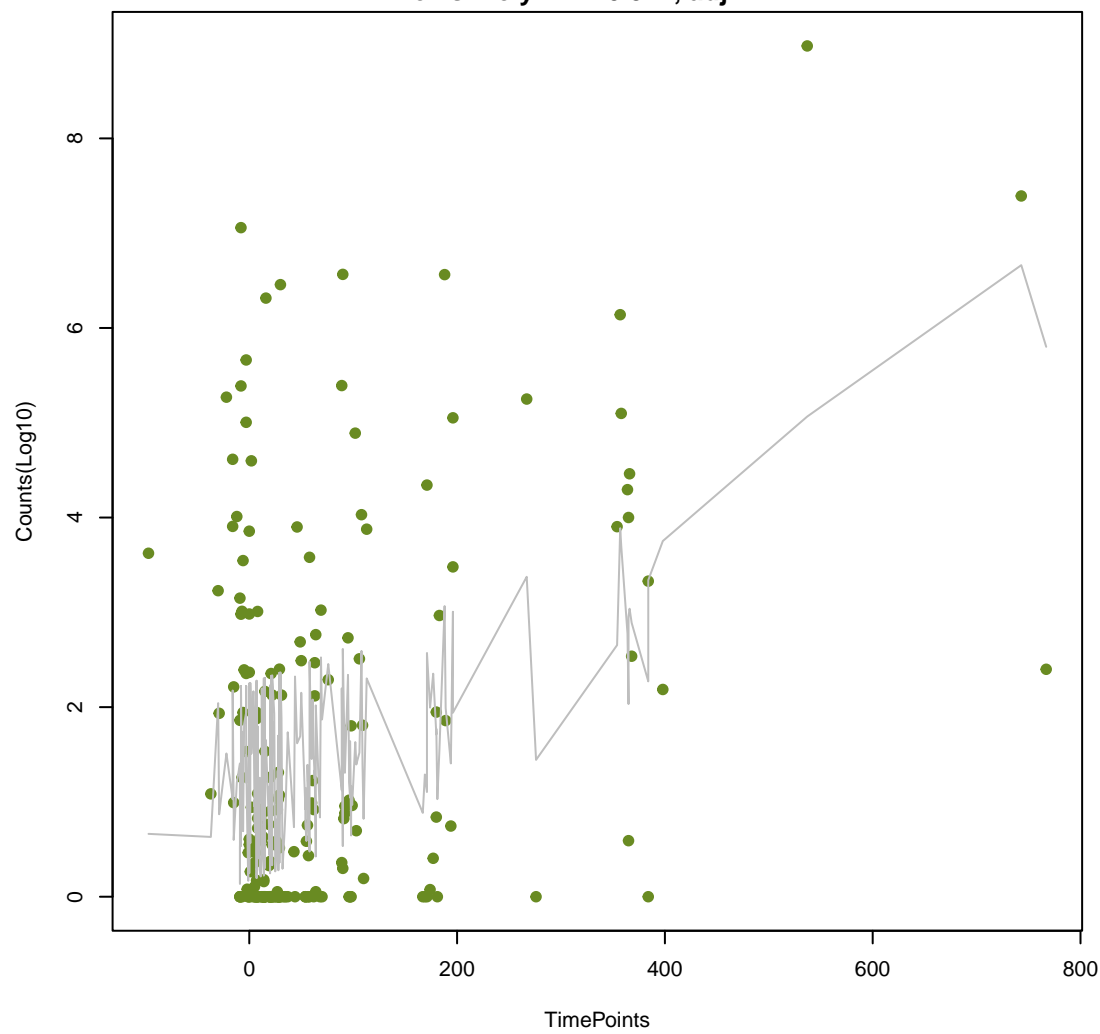
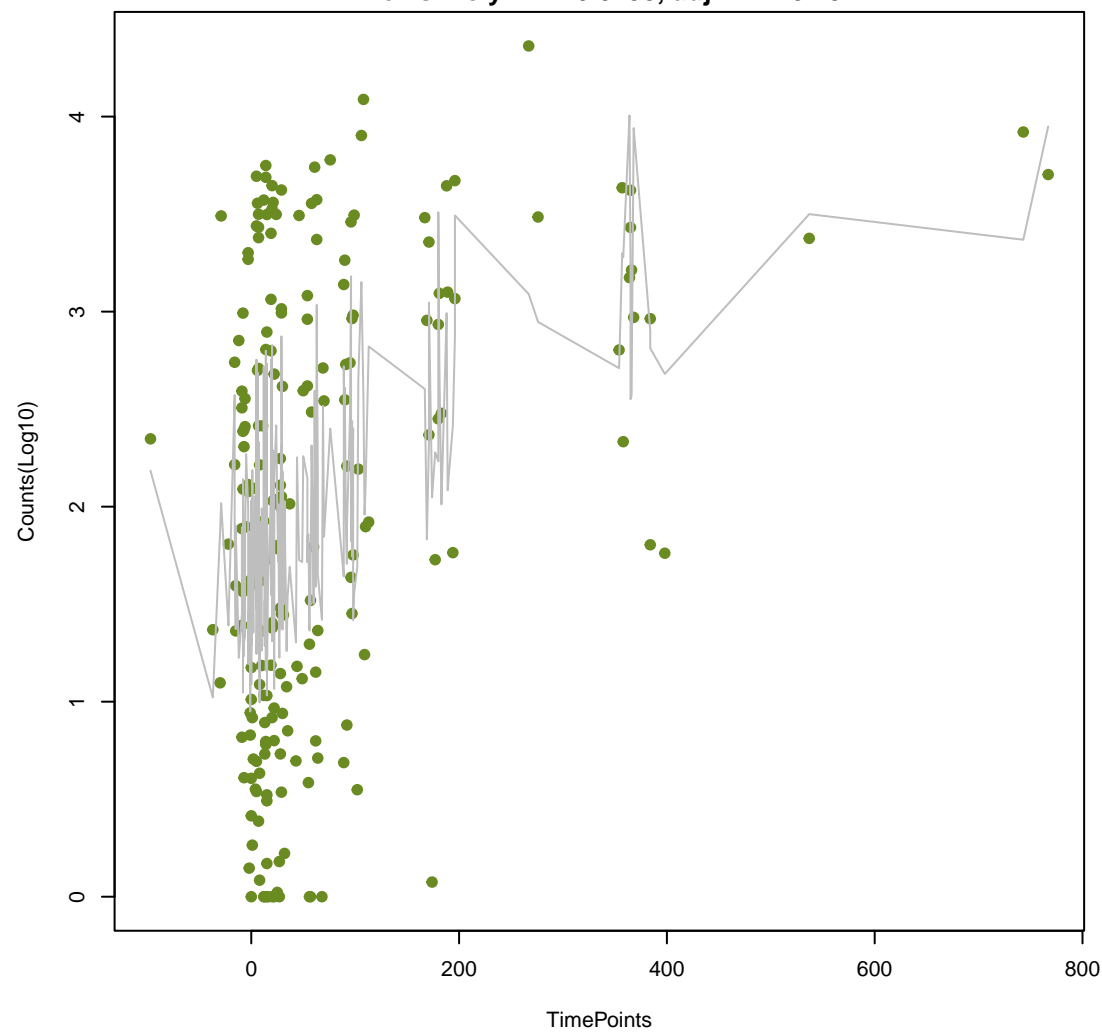


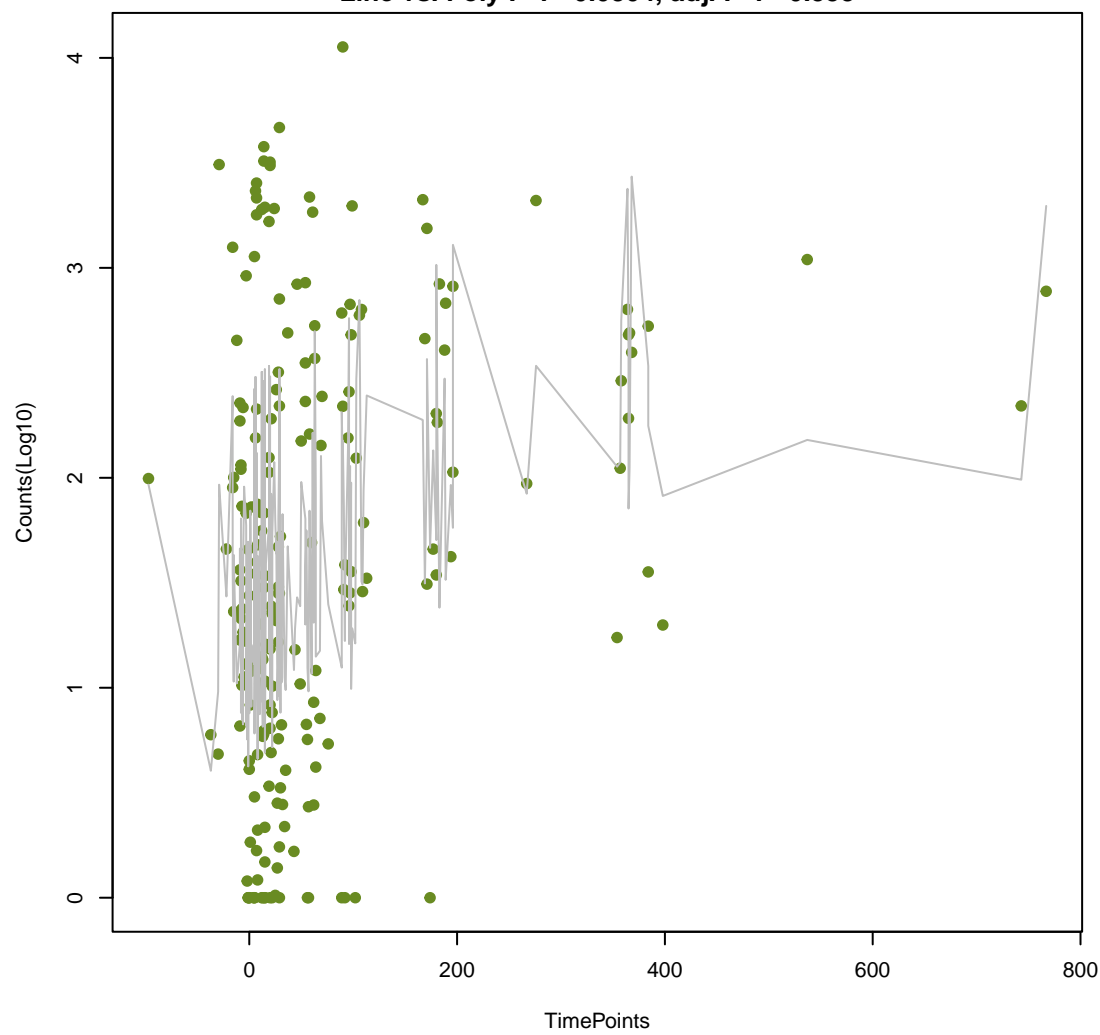
APH(2")  
ANOVA P=5.26e-07, adj. ANOVA-P=4.55e-05  
Line vs. Poly F-P=0.571, adj. F-P=1



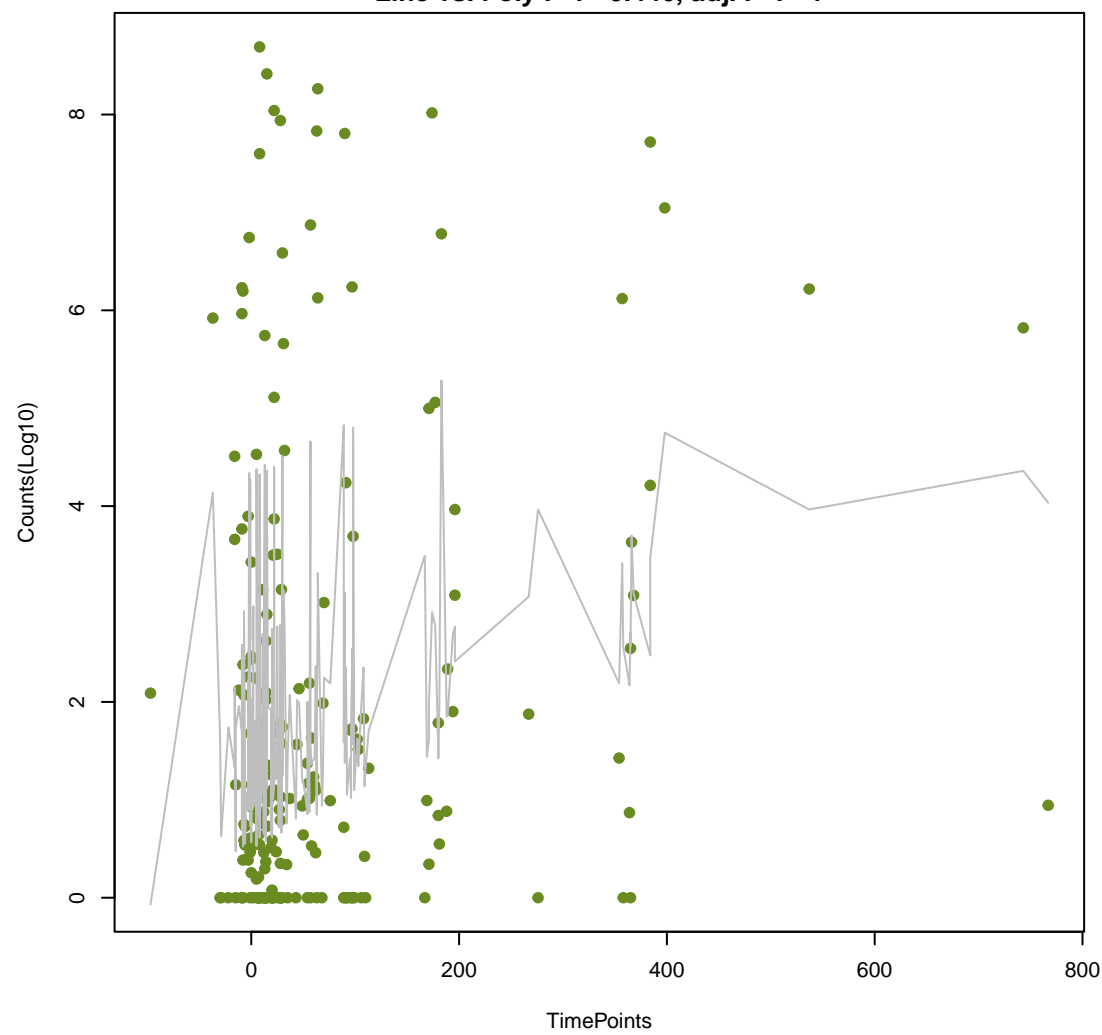
APH(3')  
ANOVA P=1e-06, adj. ANOVA-P=4.55e-05  
Line vs. Poly F-P=0.0193, adj. F-P=0.487



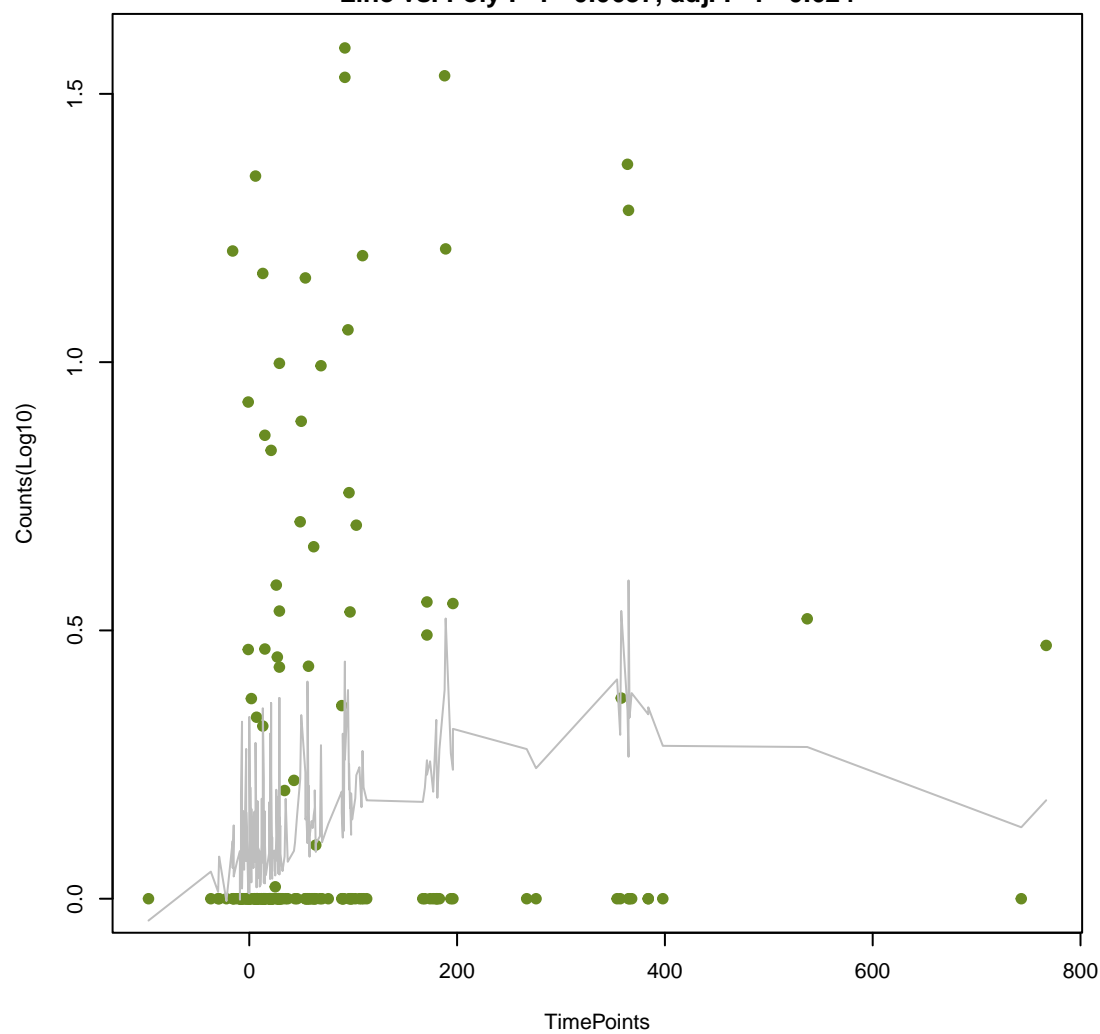
streptothricin acetyltransferase (SAT)  
ANOVA P=3.51e-05, adj. ANOVA-P=0.00106  
Line vs. Poly F-P=0.0304, adj. F-P=0.553



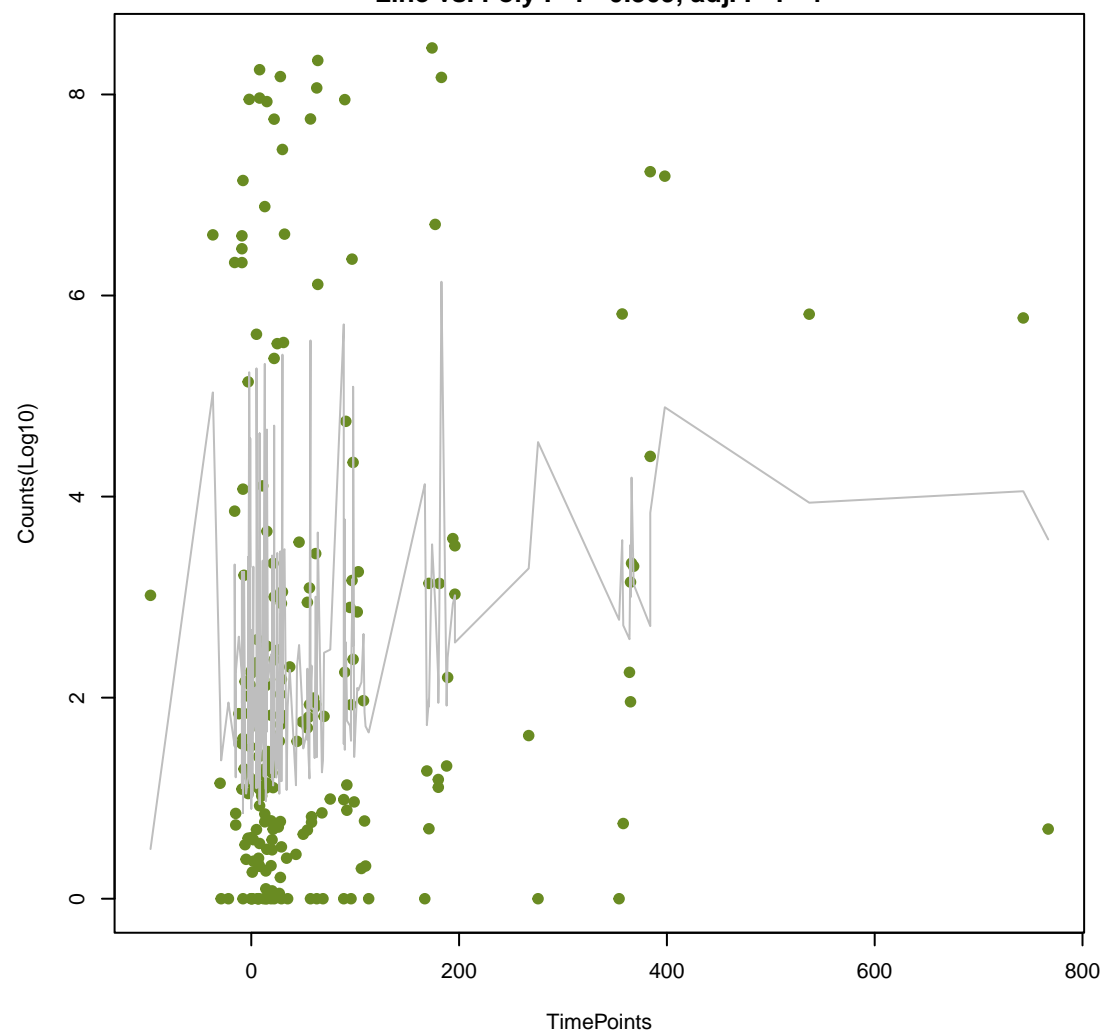
ampC-type beta-lactamase  
ANOVA P=0.00182, adj. ANOVA-P=0.0414  
Line vs. Poly F-P=0.446, adj. F-P=1



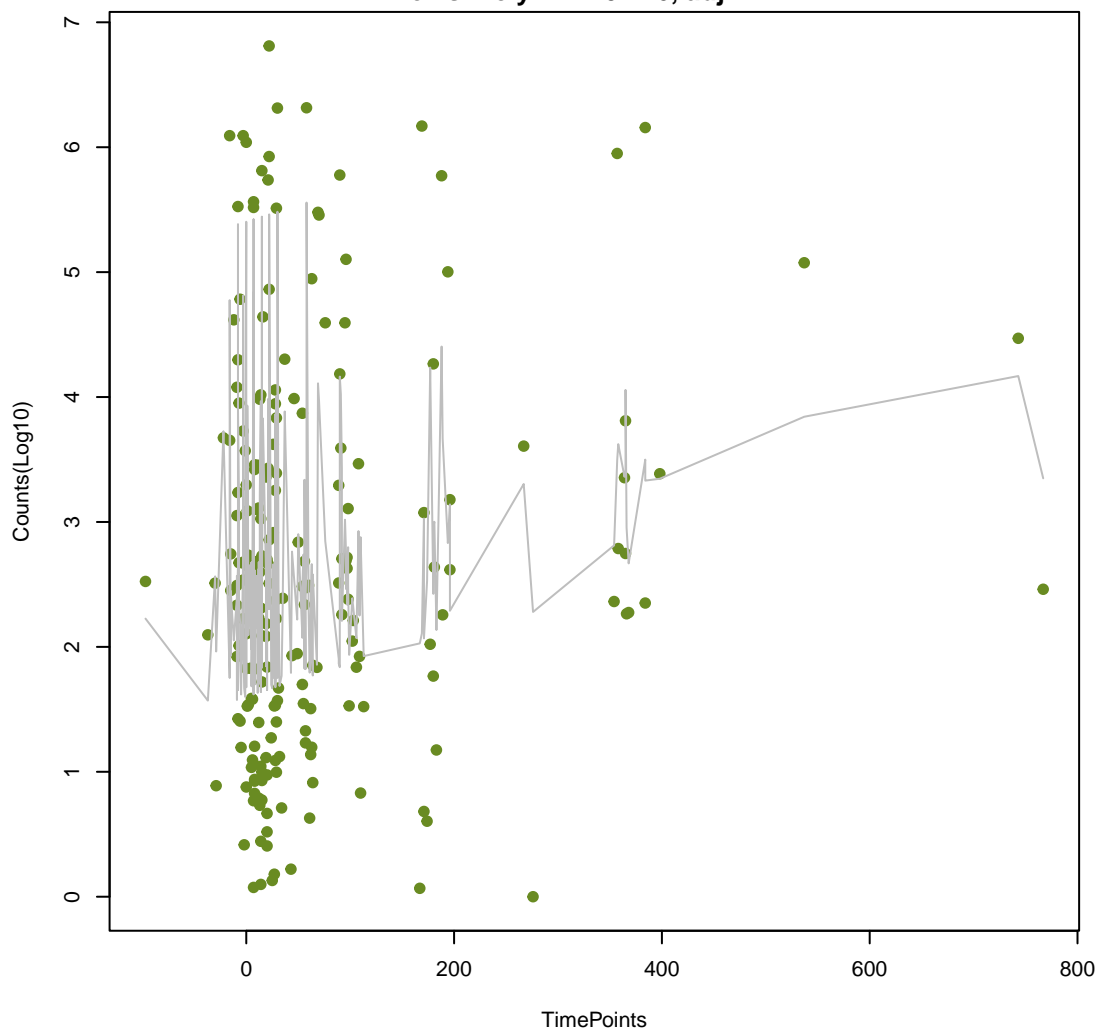
tunicamycin resistance protein  
ANOVA P=0.00733, adj. ANOVA-P=0.115  
Line vs. Poly F-P=0.0637, adj. F-P=0.624



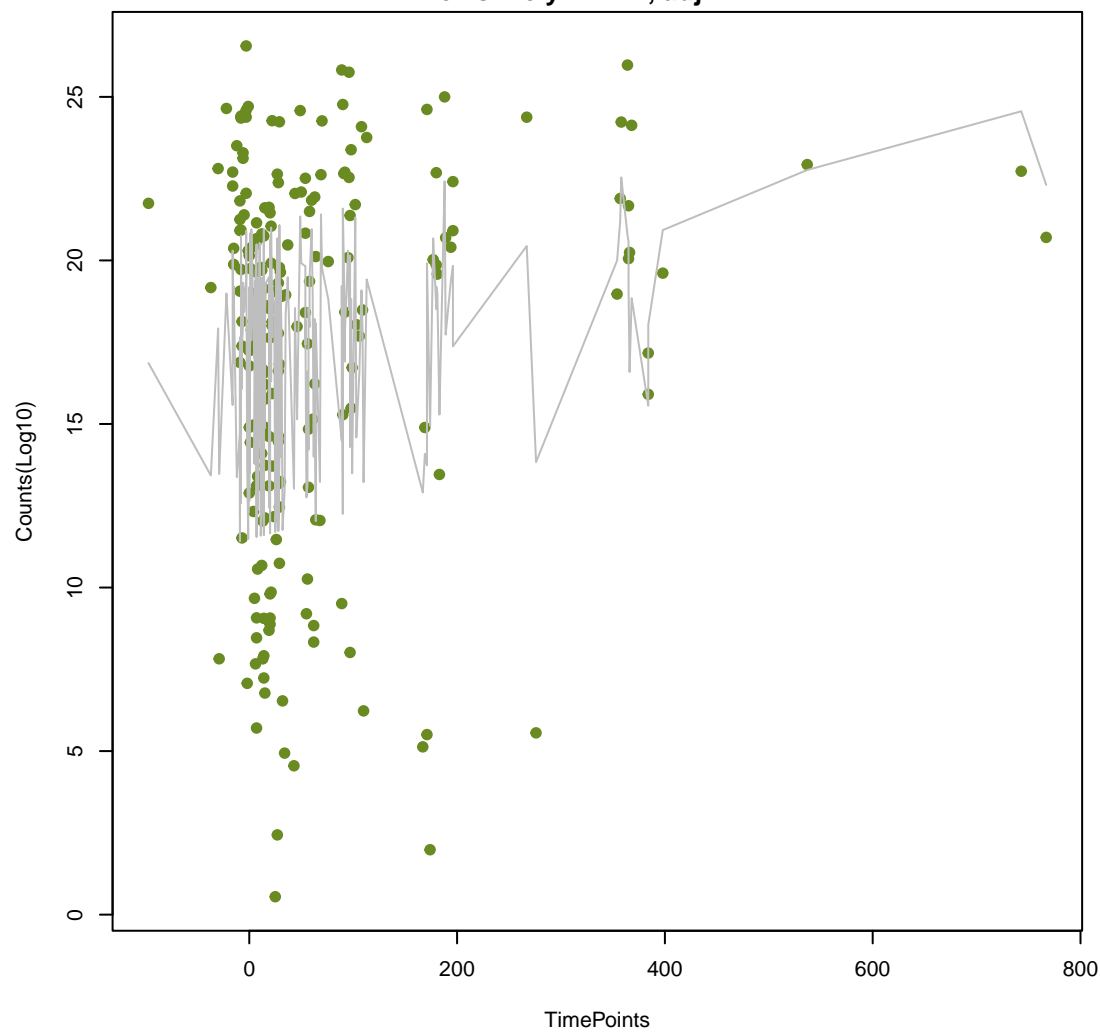
itorator superfamily (MFS) antibiotic efflux pump;resistance-nodulation-cell division (RND) a  
ANOVA P=0.00758, adj. ANOVA-P=0.115  
Line vs. Poly F-P=0.309, adj. F-P=1



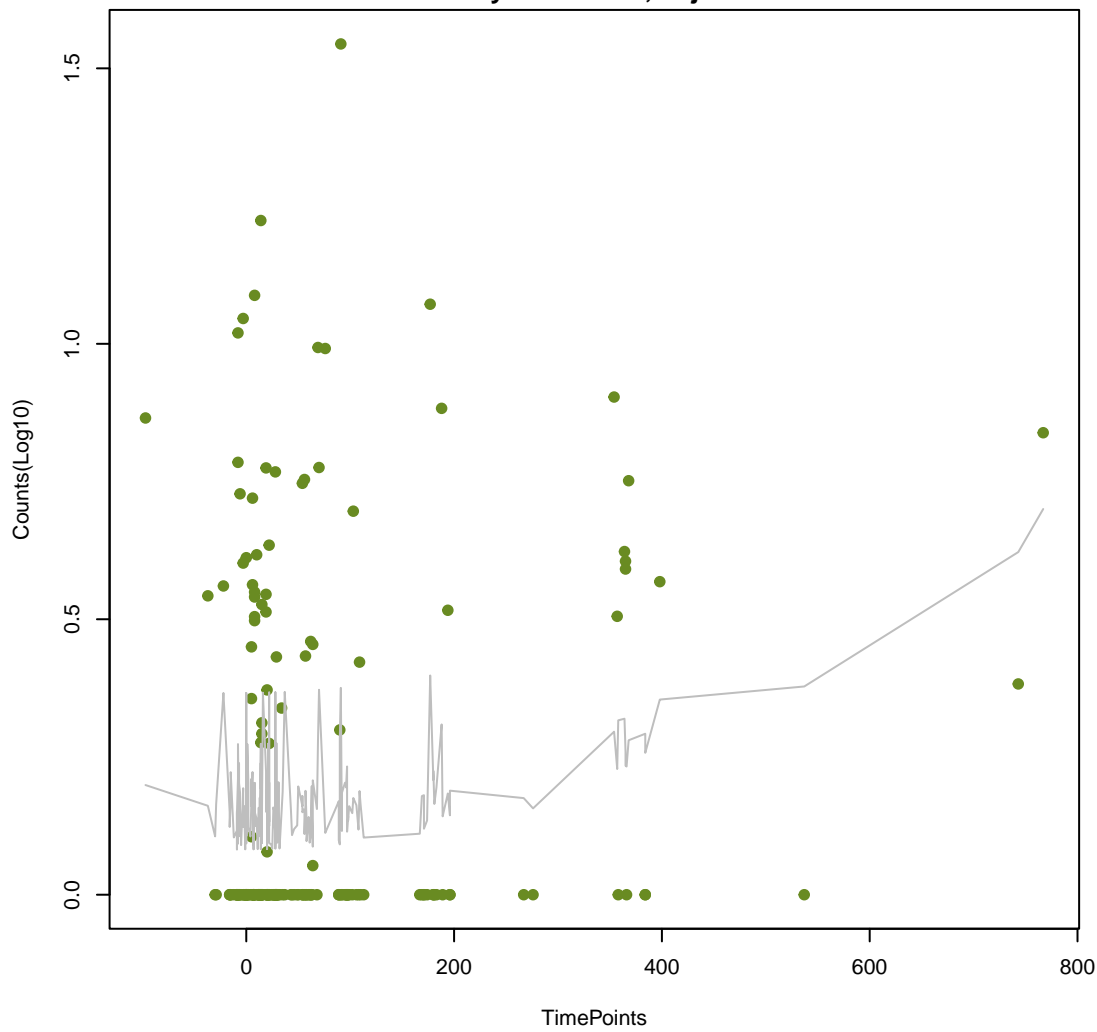
**rifamycin-resistant beta-subunit of RNA polymerase (rpoB)**  
ANOVA P=0.0115, adj. ANOVA-P=0.141  
Line vs. Poly F-P=0.716, adj. F-P=1



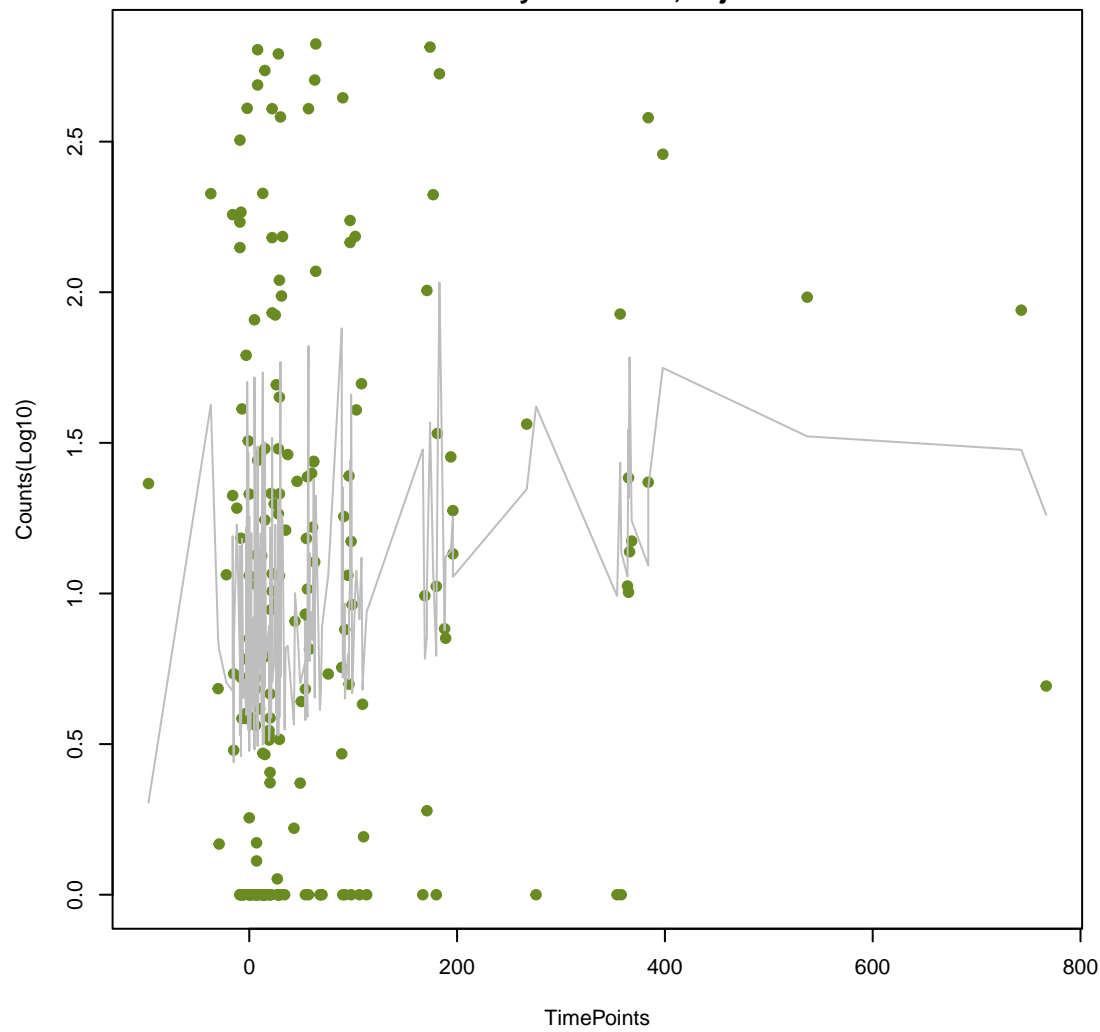
**tetracycline-resistant ribosomal protection protein**  
ANOVA P=0.0124, adj. ANOVA-P=0.141  
Line vs. Poly F-P=1, adj. F-P=1



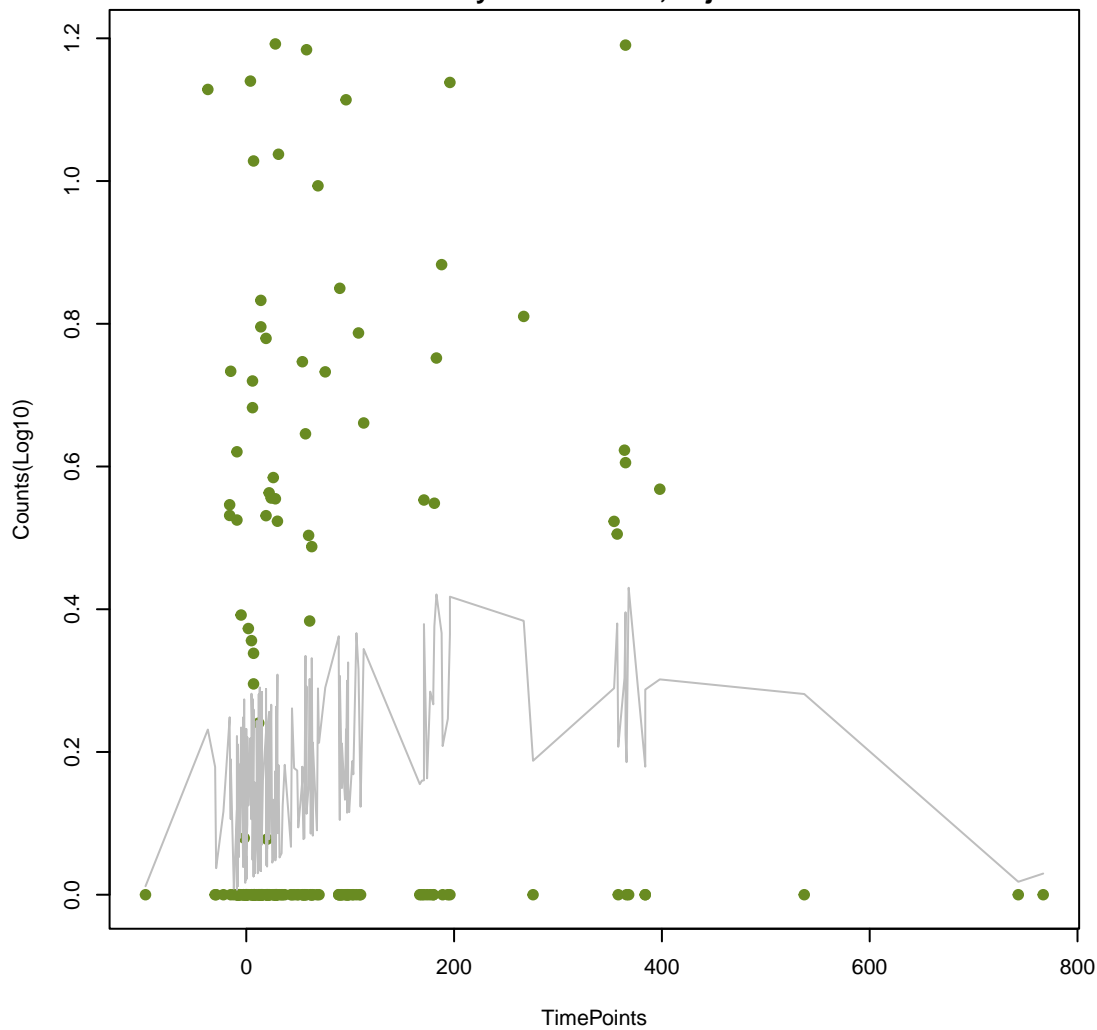
**KPC beta-lactamase**  
ANOVA P=0.0171, adj. ANOVA-P=0.153  
Line vs. Poly F-P=0.182, adj. F-P=0.874



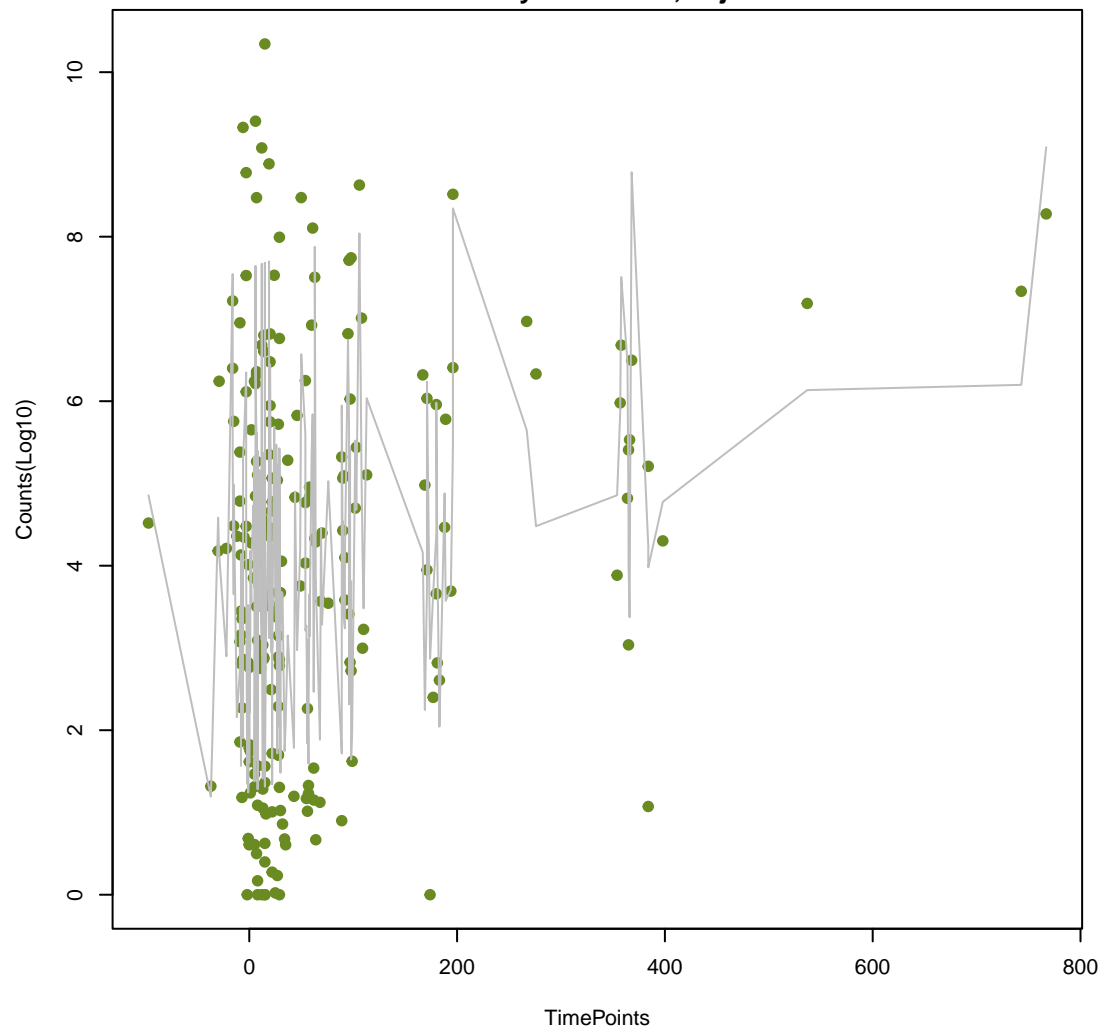
**undecaprenyl pyrophosphate related proteins**  
ANOVA P=0.0173, adj. ANOVA-P=0.153  
Line vs. Poly F-P=0.252, adj. F-P=1



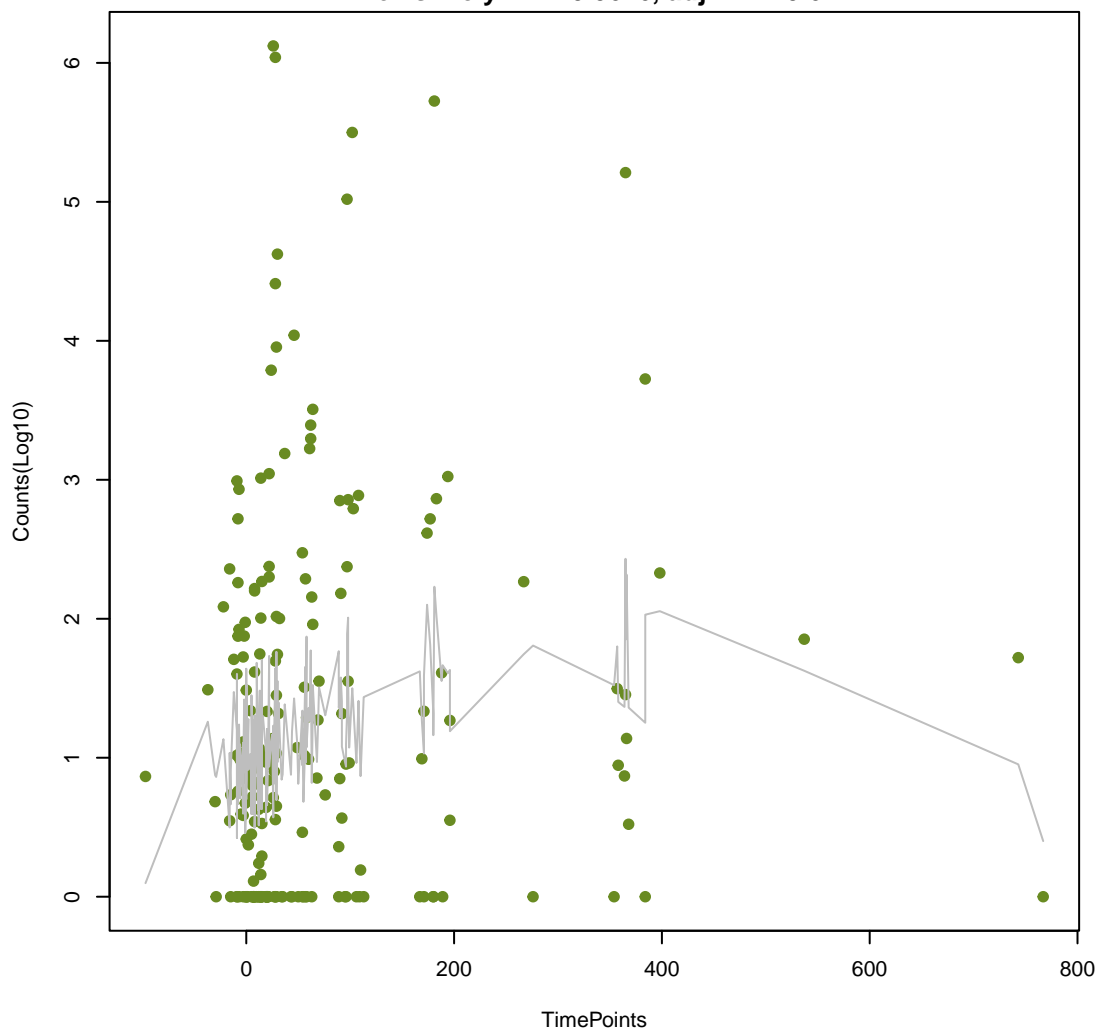
**16S rRNA methyltransferase (A1408)**  
ANOVA P=0.0185, adj. ANOVA-P=0.153  
Line vs. Poly F-P=0.00122, adj. F-P=0.111



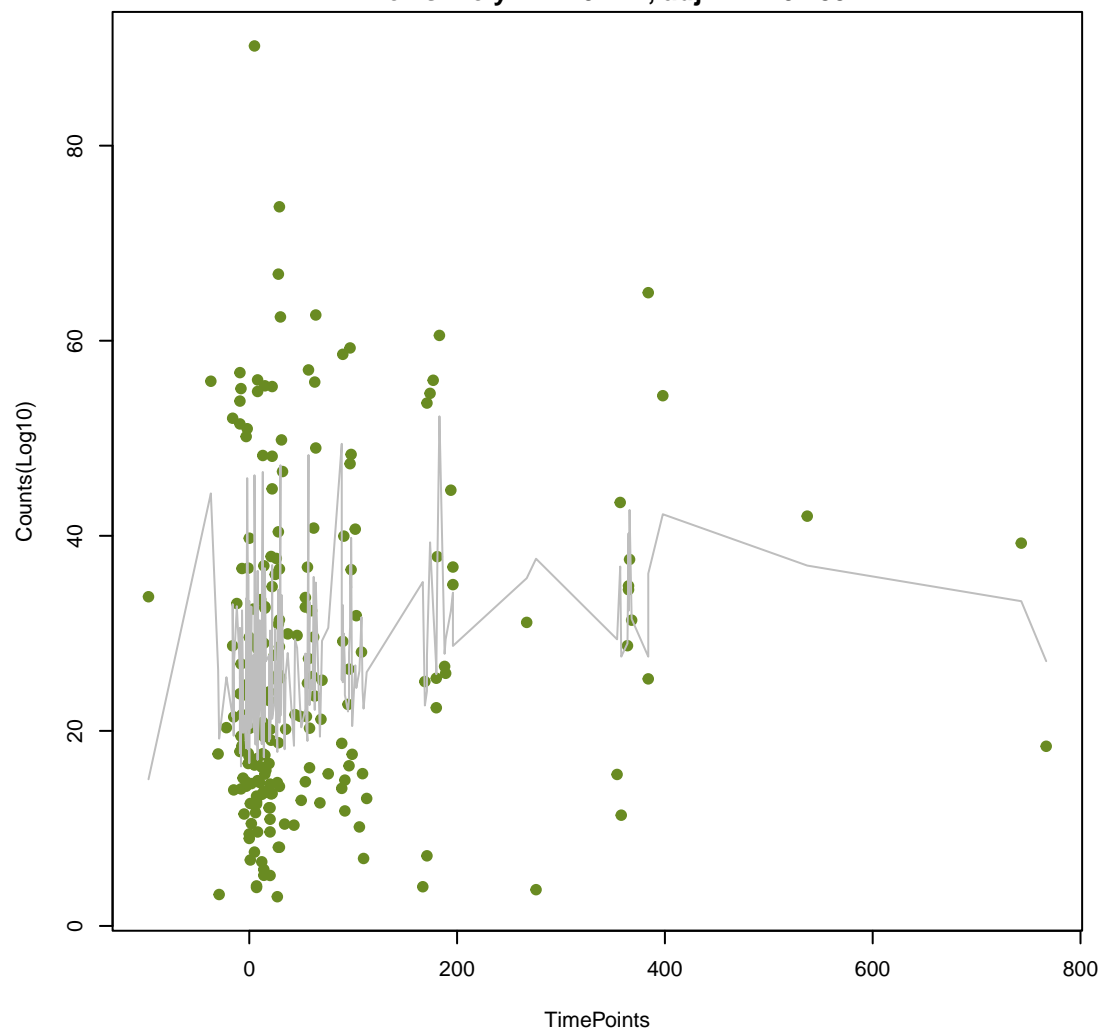
**ANT(6)**  
ANOVA P=0.0231, adj. ANOVA-P=0.174  
Line vs. Poly F-P=0.346, adj. F-P=1



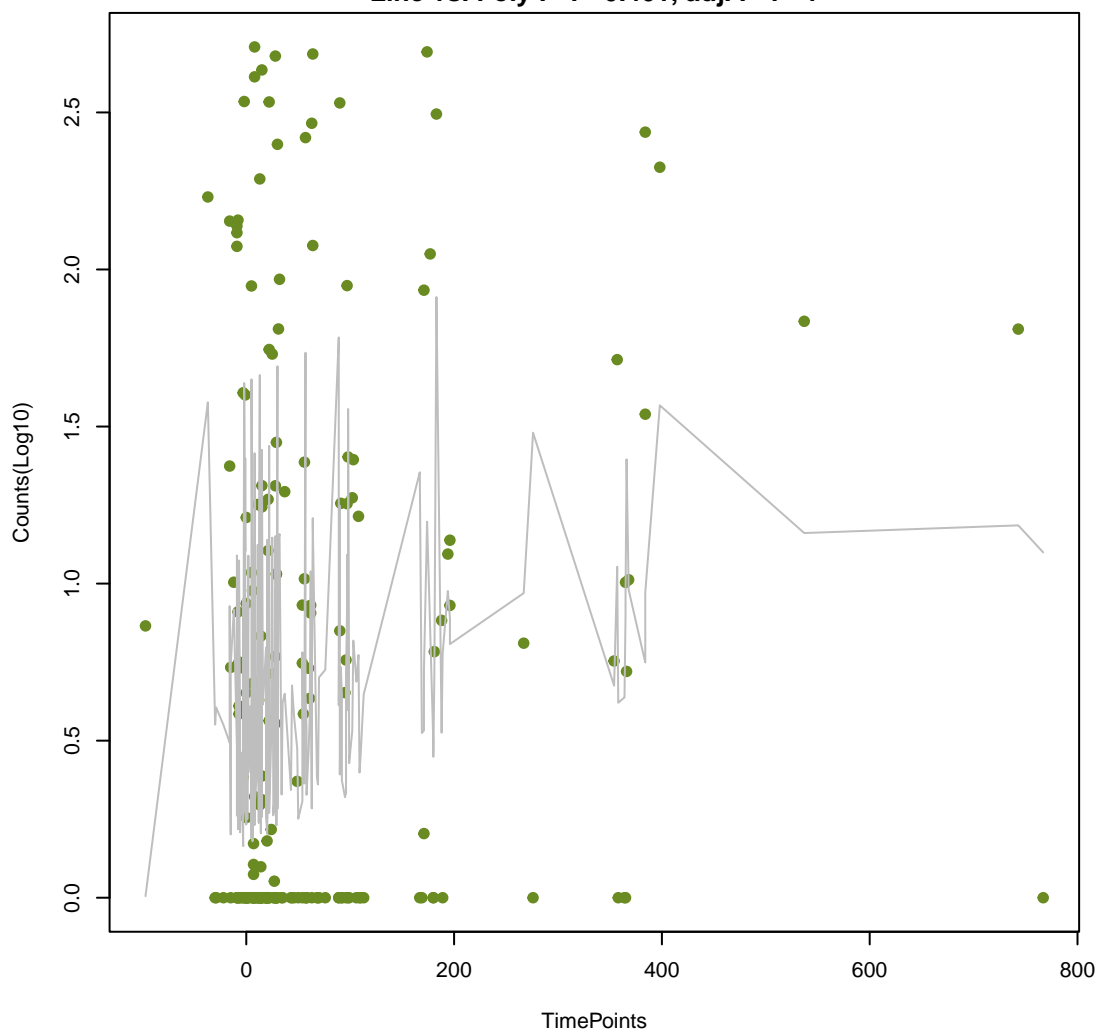
**General Bacterial Porin with reduced permeability to beta-lactams**  
ANOVA P=0.0248, adj. ANOVA-P=0.174  
Line vs. Poly F-P=0.0616, adj. F-P=0.624



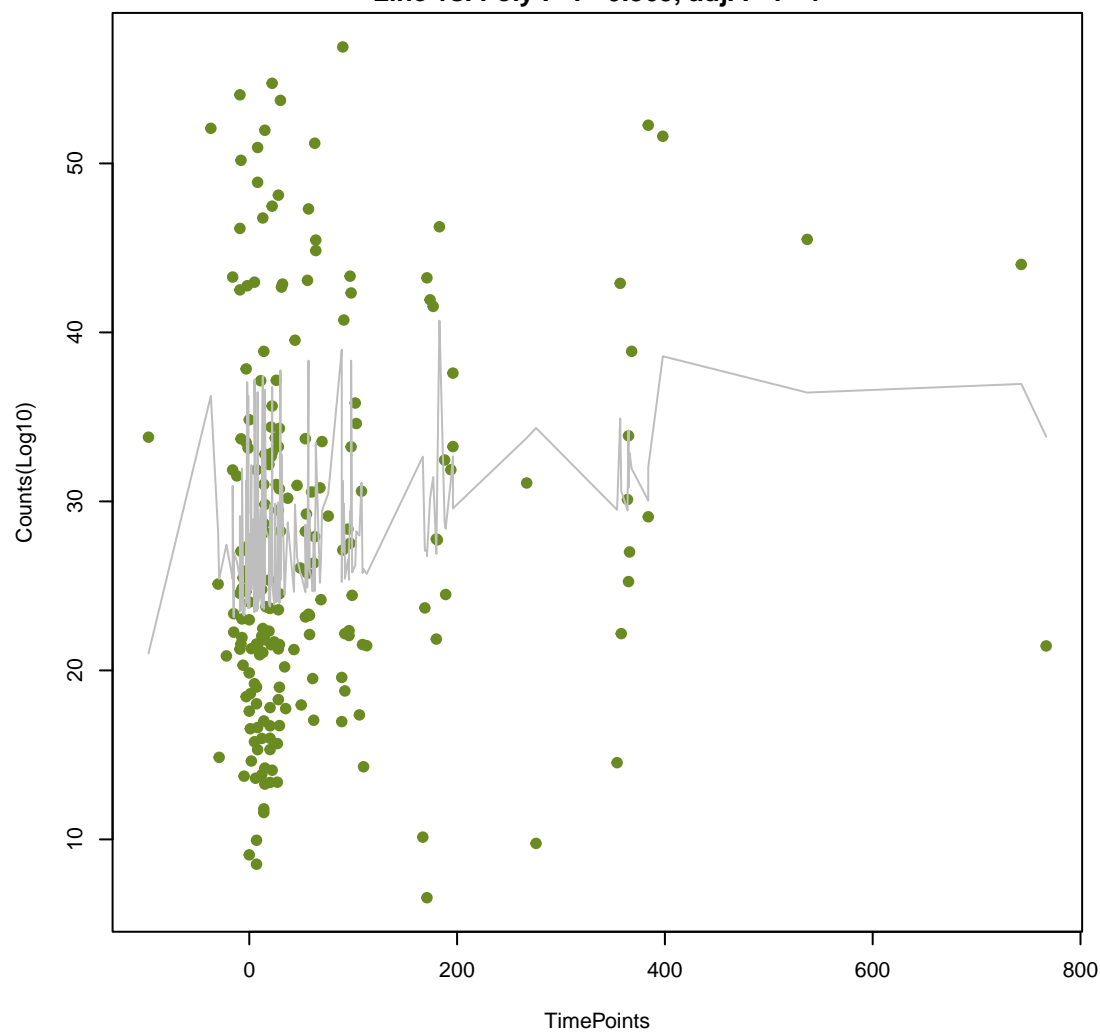
**resistance-nodulation-cell division (RND) antibiotic efflux pump**  
ANOVA P=0.0294, adj. ANOVA-P=0.191  
Line vs. Poly F-P=0.121, adj. F-P=0.739



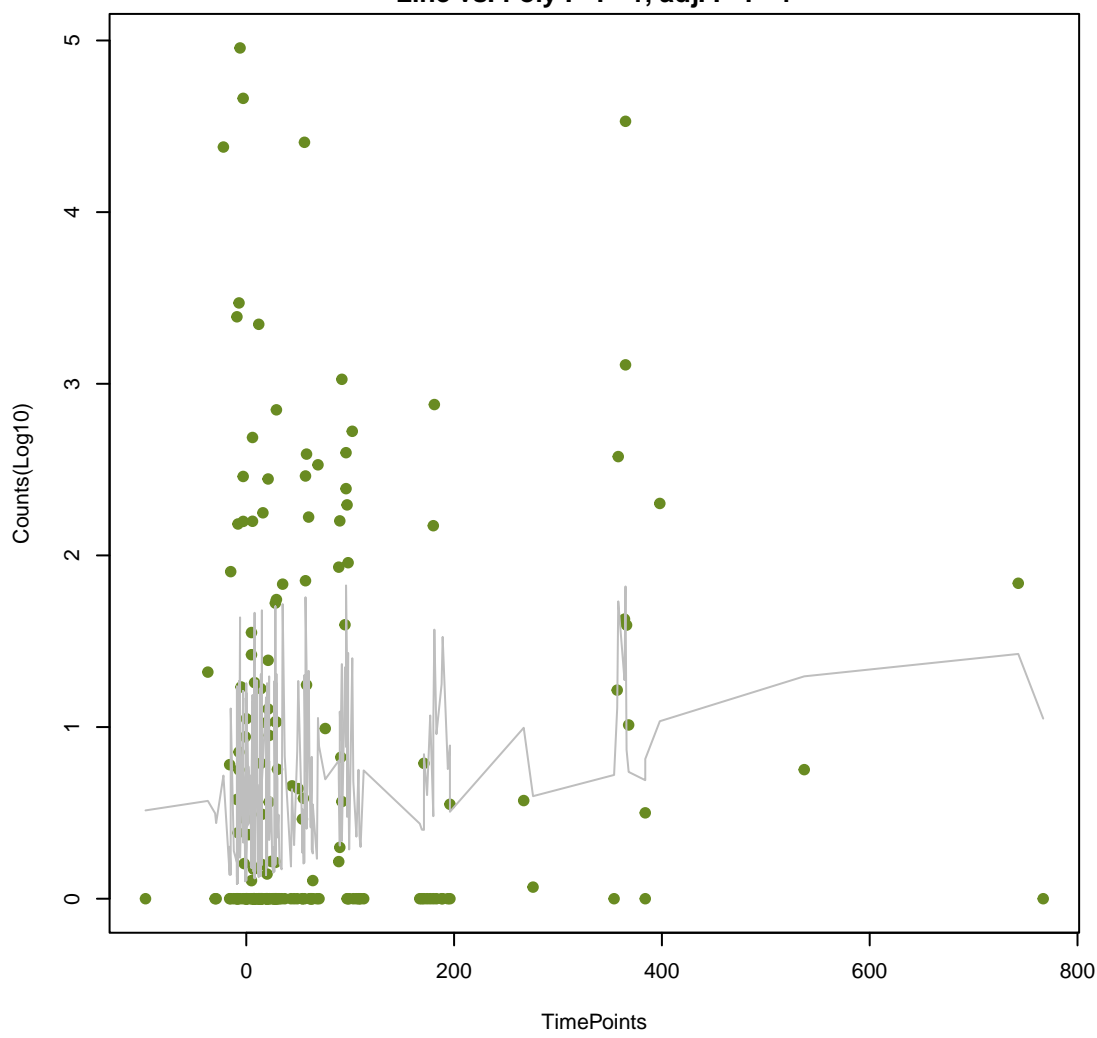
**kdpDE**  
ANOVA P=0.0317, adj. ANOVA-P=0.192  
Line vs. Poly F-P=0.401, adj. F-P=1



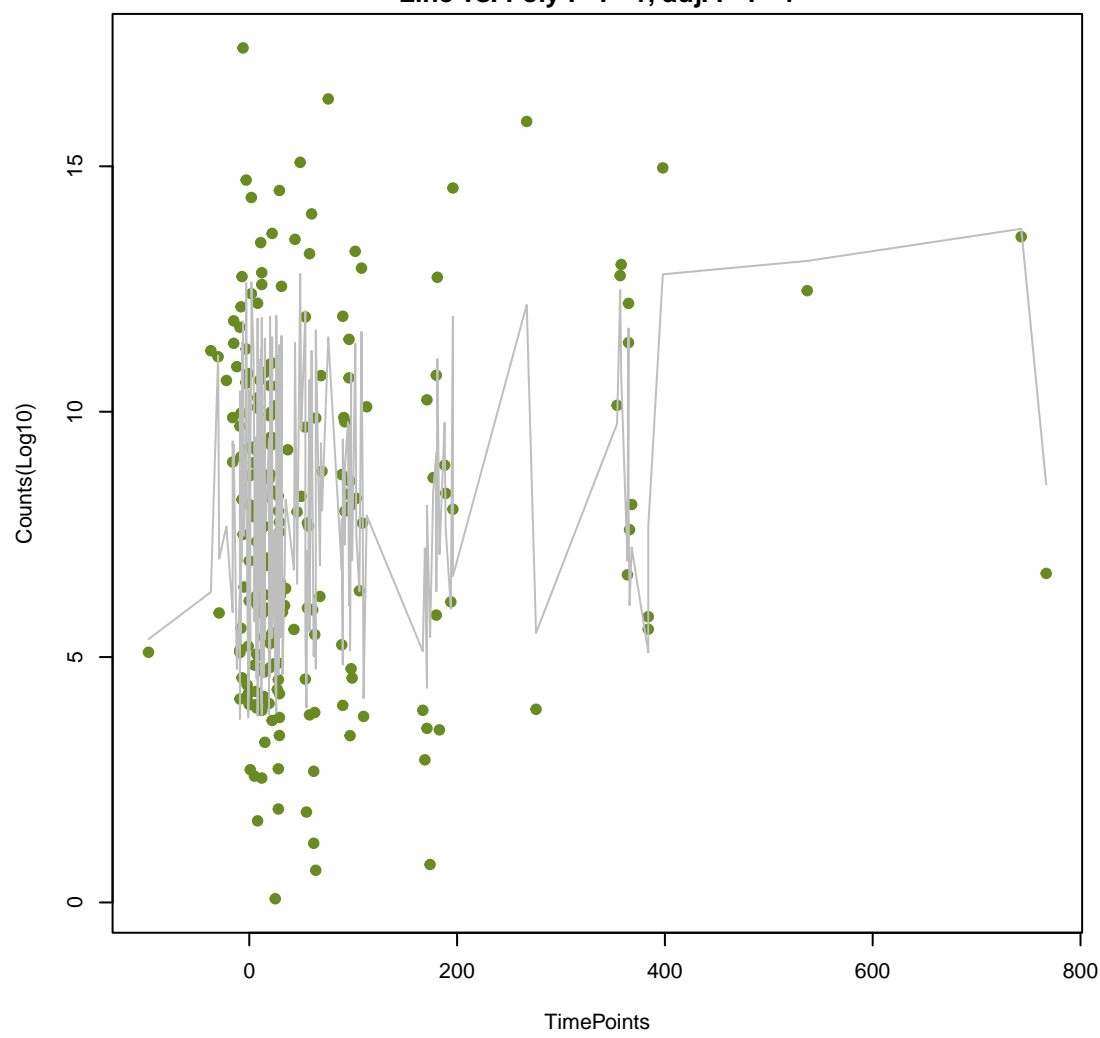
**major facilitator superfamily (MFS) antibiotic efflux pump**  
ANOVA P=0.0399, adj. ANOVA-P=0.227  
Line vs. Poly F-P=0.365, adj. F-P=1



**chloramphenicol acetyltransferase (CAT)**  
ANOVA P=0.0505, adj. ANOVA-P=0.27  
Line vs. Poly F-P=1, adj. F-P=1

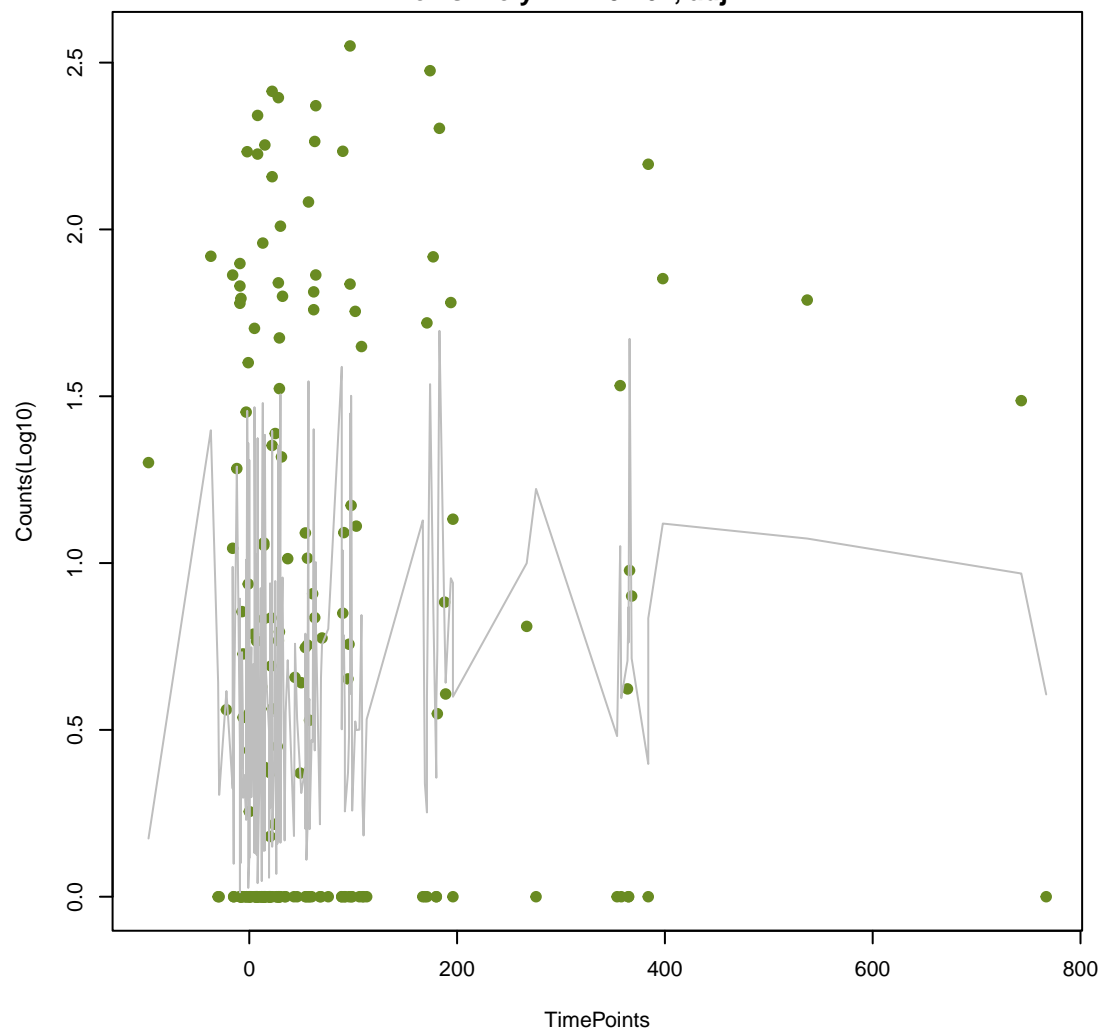


**Erm 23S ribosomal RNA methyltransferase**  
ANOVA P=0.07, adj. ANOVA-P=0.354  
Line vs. Poly F-P=1, adj. F-P=1



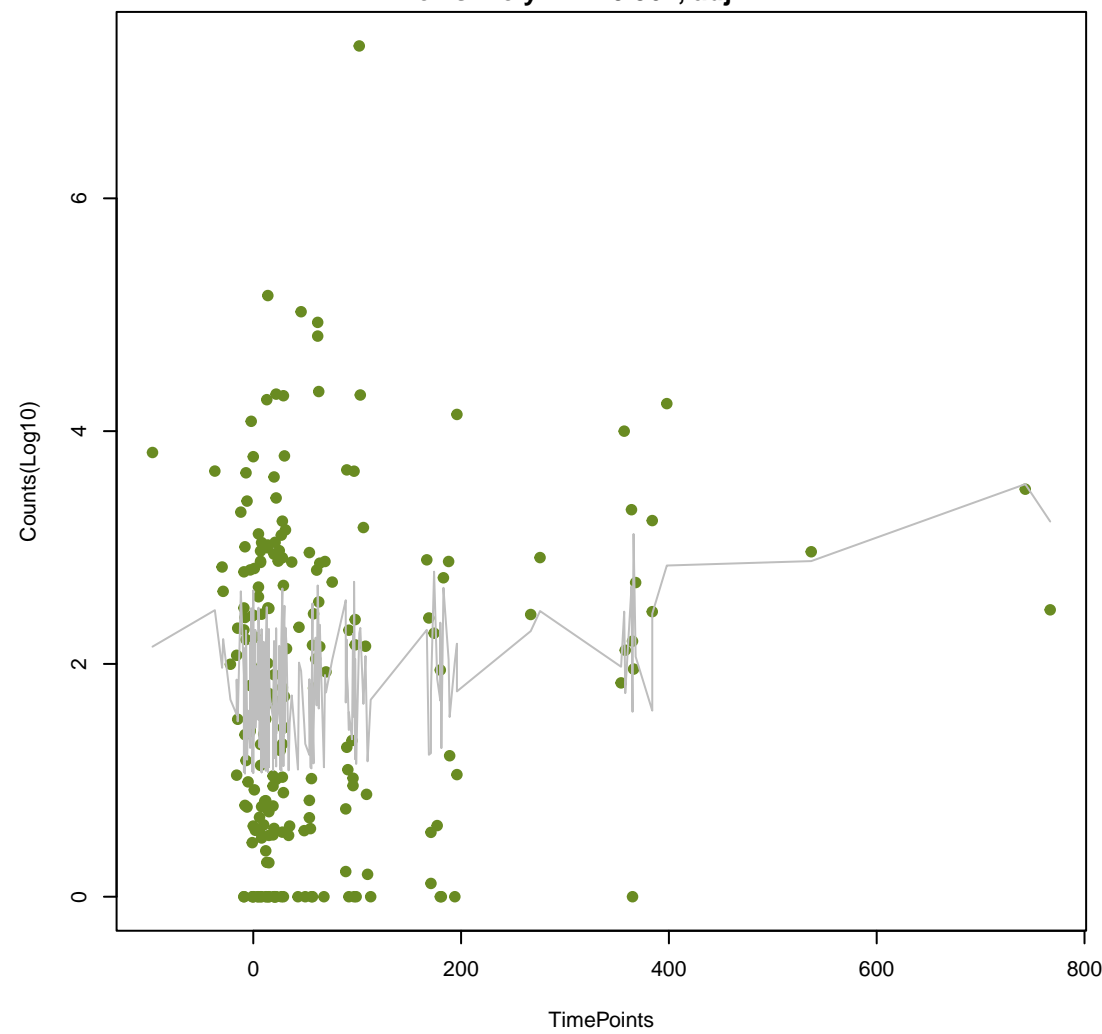
al Porin with reduced permeability to beta-lactams;resistance-nodulation-cell division (RN

ANOVA P=0.0867, adj. ANOVA-P=0.398  
Line vs. Poly F-P=0.262, adj. F-P=1



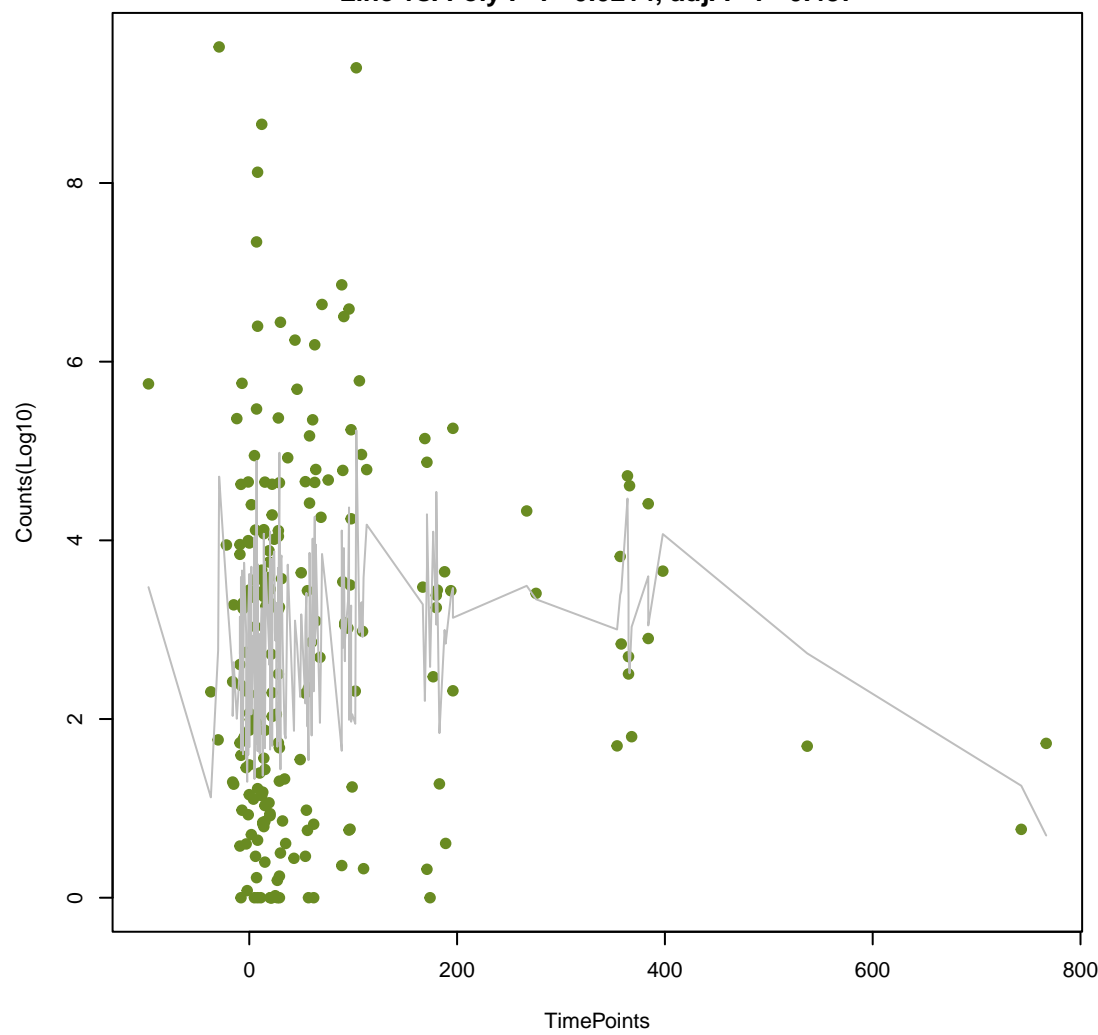
AAC(6')

ANOVA P=0.0893, adj. ANOVA-P=0.398  
Line vs. Poly F-P=0.567, adj. F-P=1



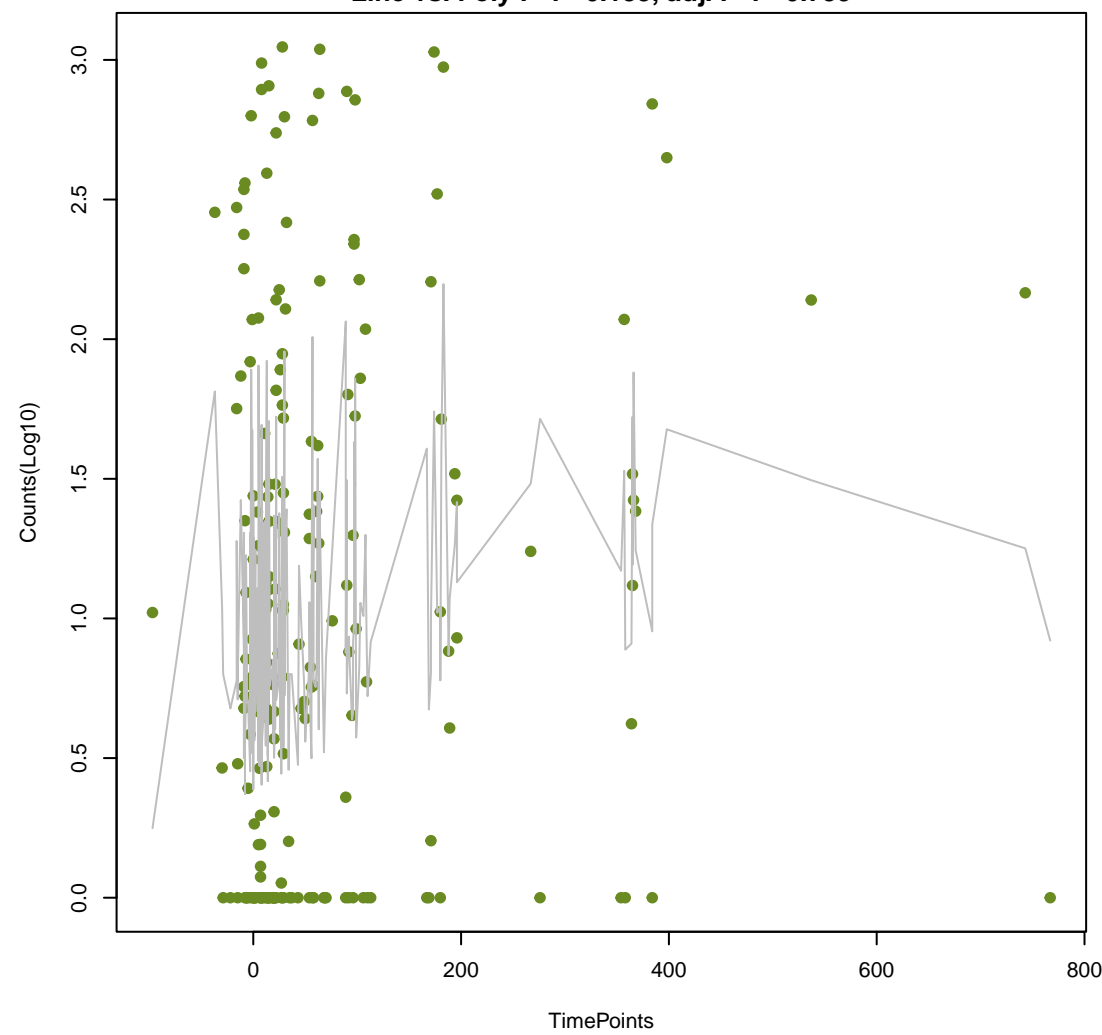
glycopeptide resistance gene cluster;vanR

ANOVA P=0.093, adj. ANOVA-P=0.398  
Line vs. Poly F-P=0.0214, adj. F-P=0.487



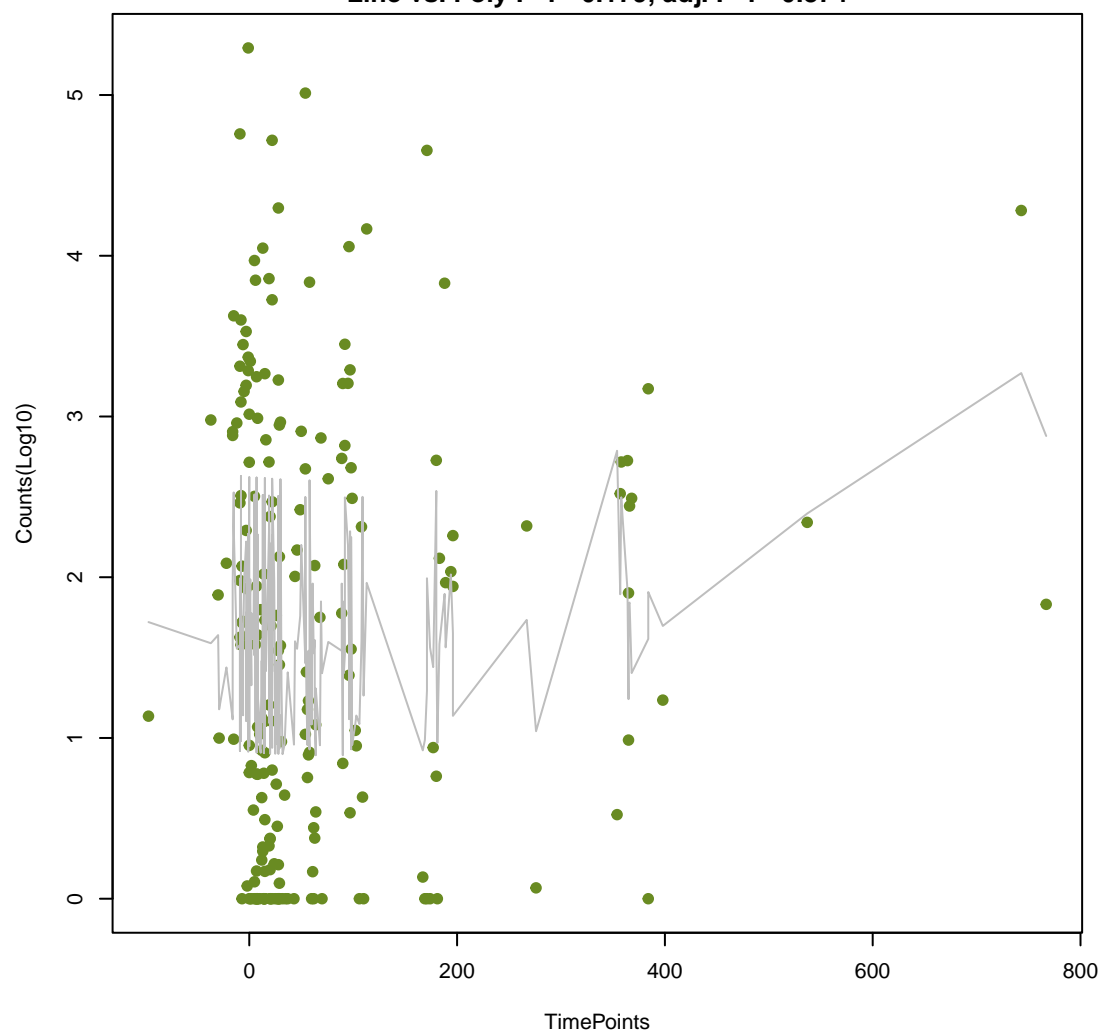
ic efflux pump;major facilitator superfamily (MFS) antibiotic efflux pump;resistance-nodulation

ANOVA P=0.0962, adj. ANOVA-P=0.398  
Line vs. Poly F-P=0.133, adj. F-P=0.739



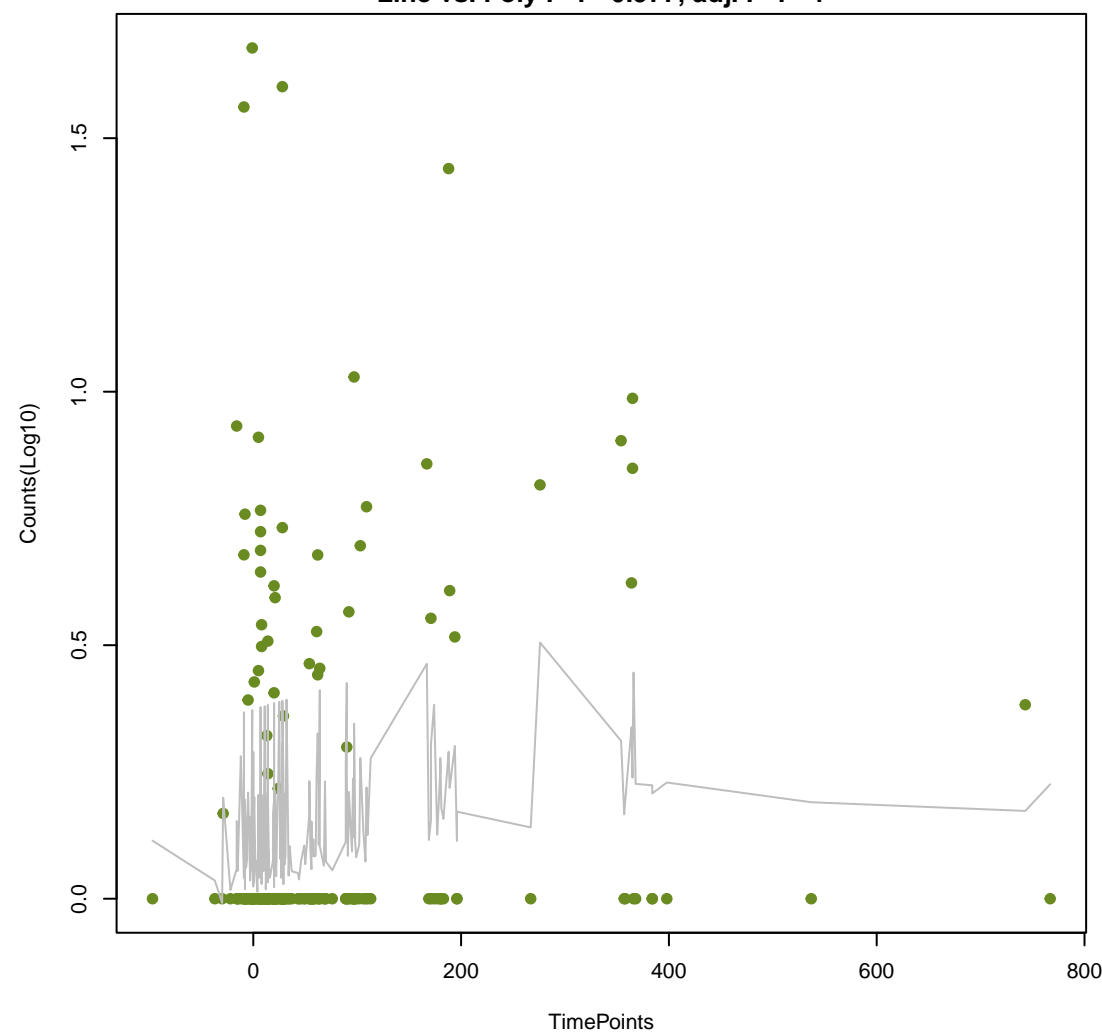
lincosamide nucleotidyltransferase (LNU)

ANOVA P=0.105, adj. ANOVA-P=0.4  
Line vs. Poly F-P=0.179, adj. F-P=0.874

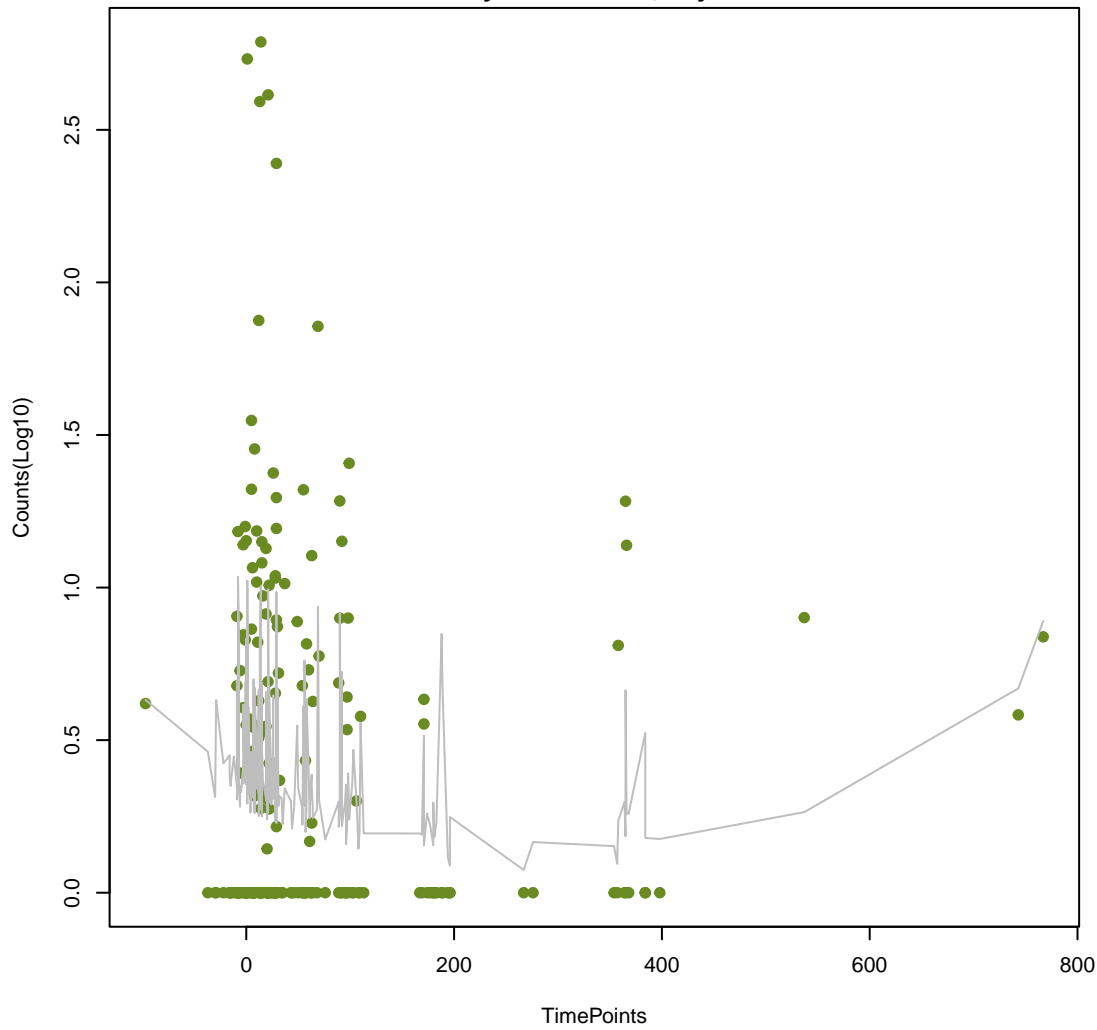


PDC beta-lactamase

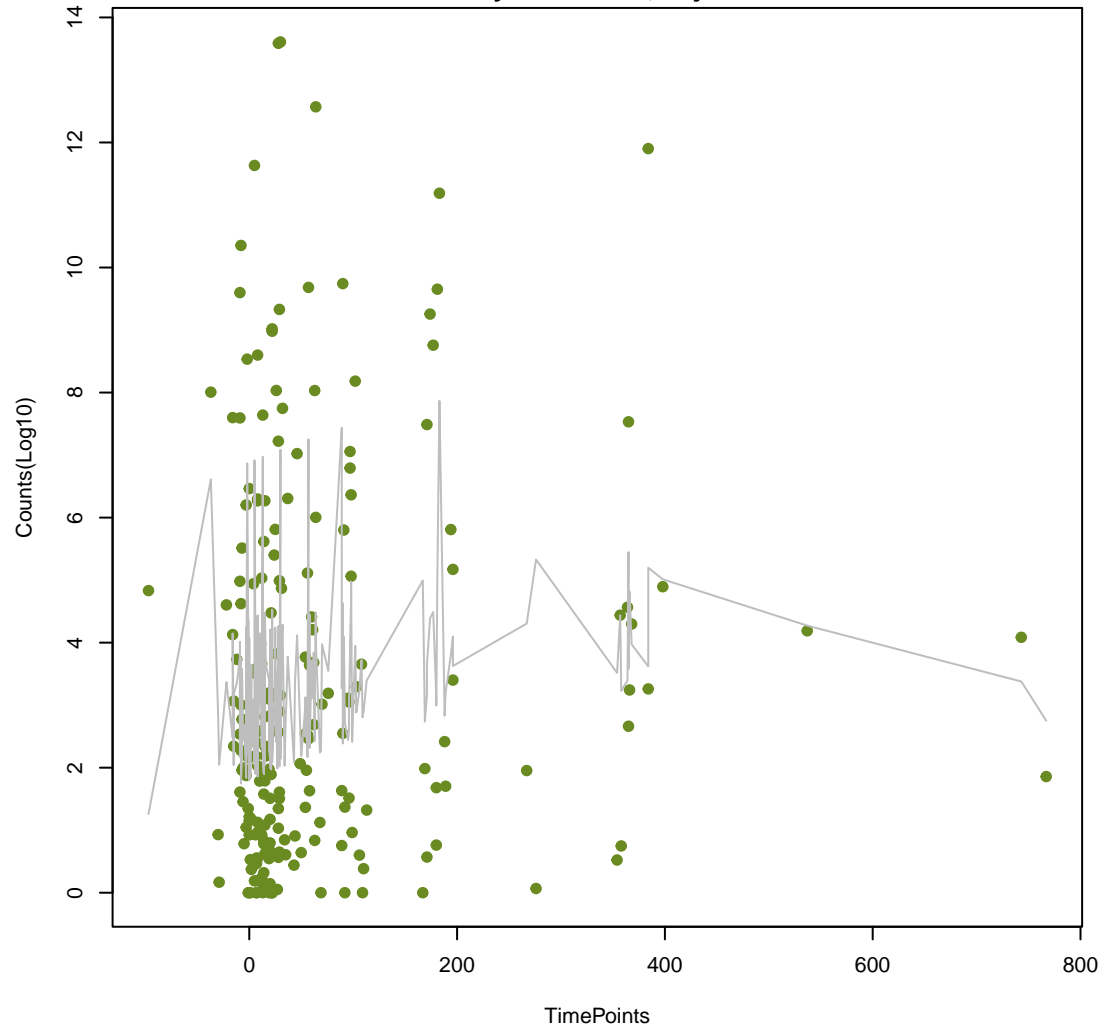
ANOVA P=0.106, adj. ANOVA-P=0.4  
Line vs. Poly F-P=0.977, adj. F-P=1



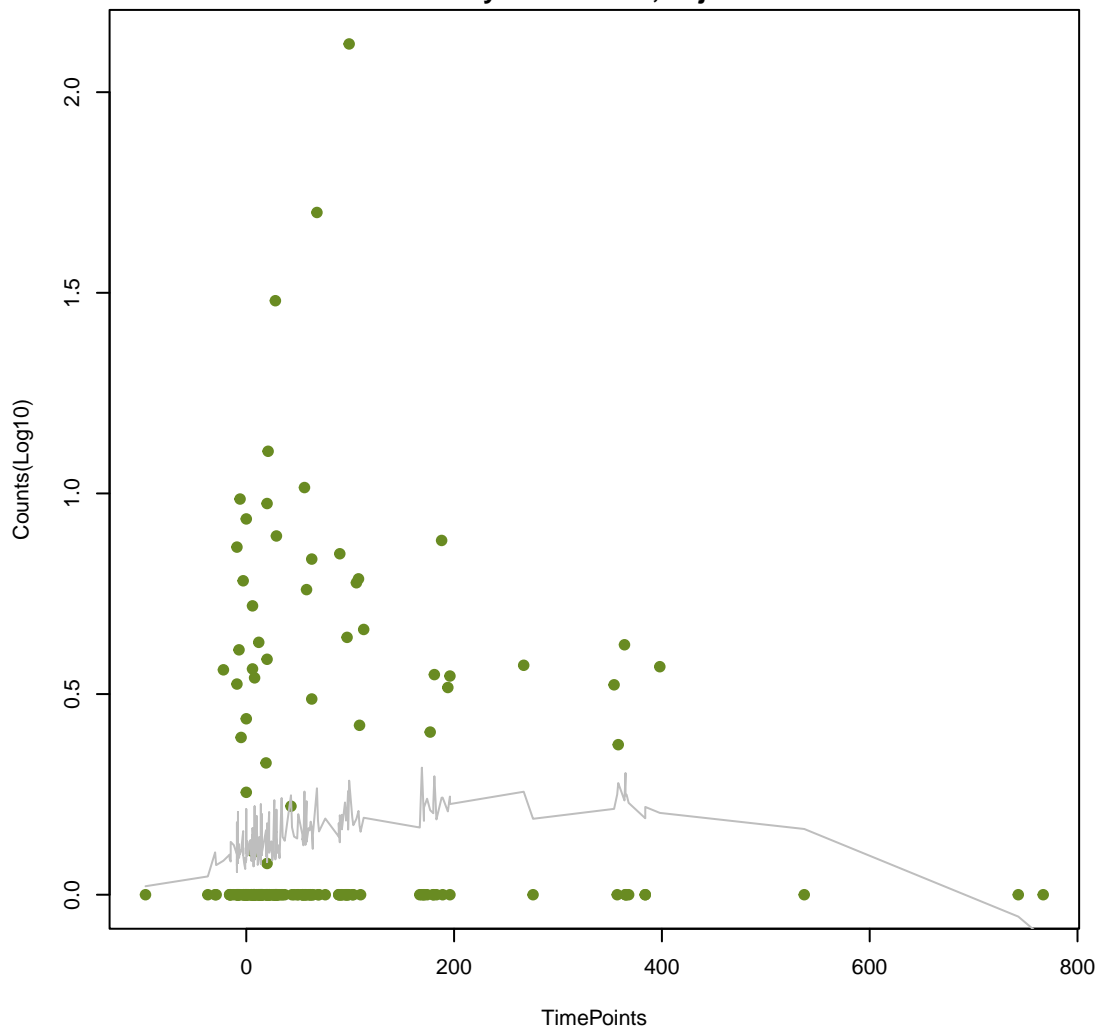
**non-erm 23S ribosomal RNA methyltransferase (G748)**  
ANOVA P=0.114, adj. ANOVA-P=0.409  
Line vs. Poly F-P=0.0192, adj. F-P=0.487



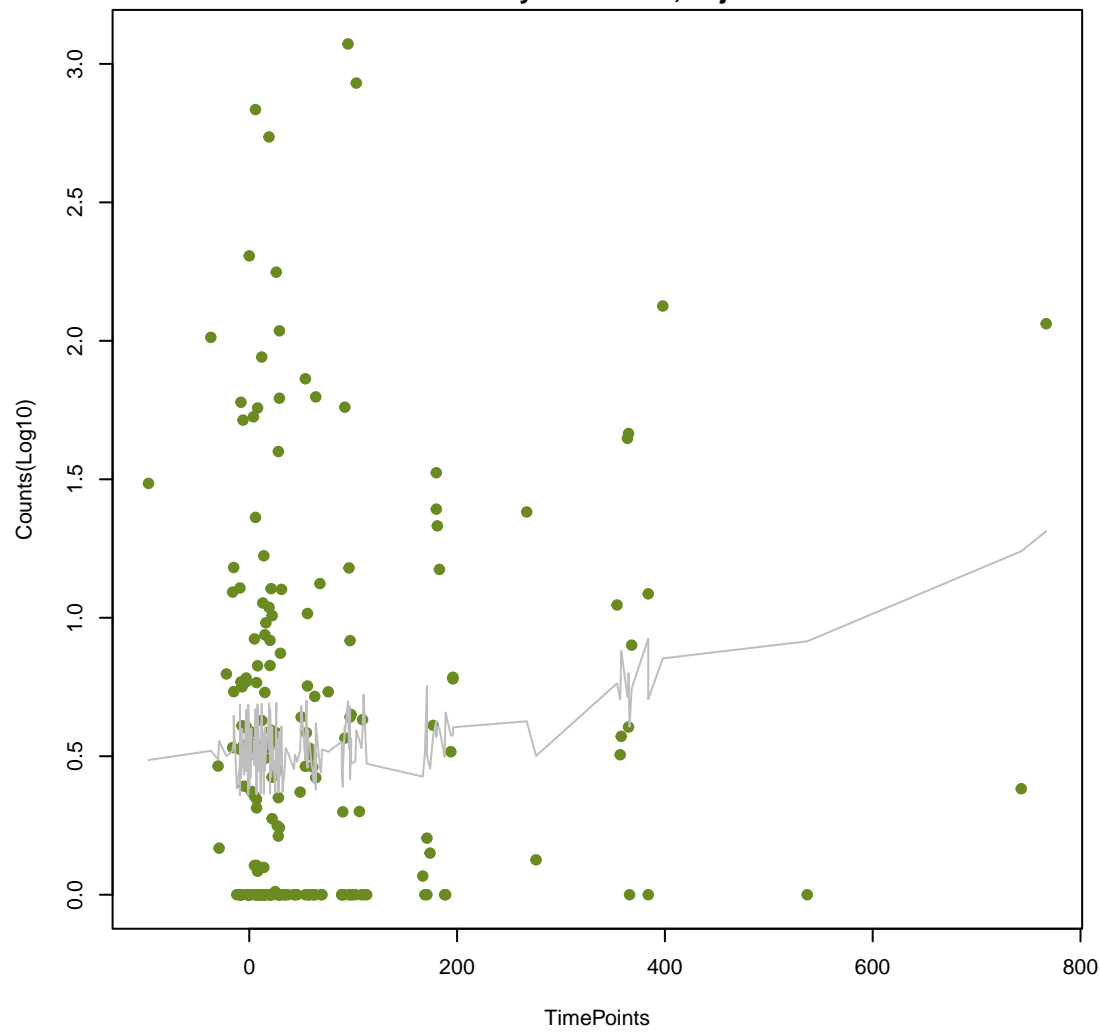
**pmr phosphoethanolamine transferase**  
ANOVA P=0.117, adj. ANOVA-P=0.409  
Line vs. Poly F-P=0.128, adj. F-P=0.739



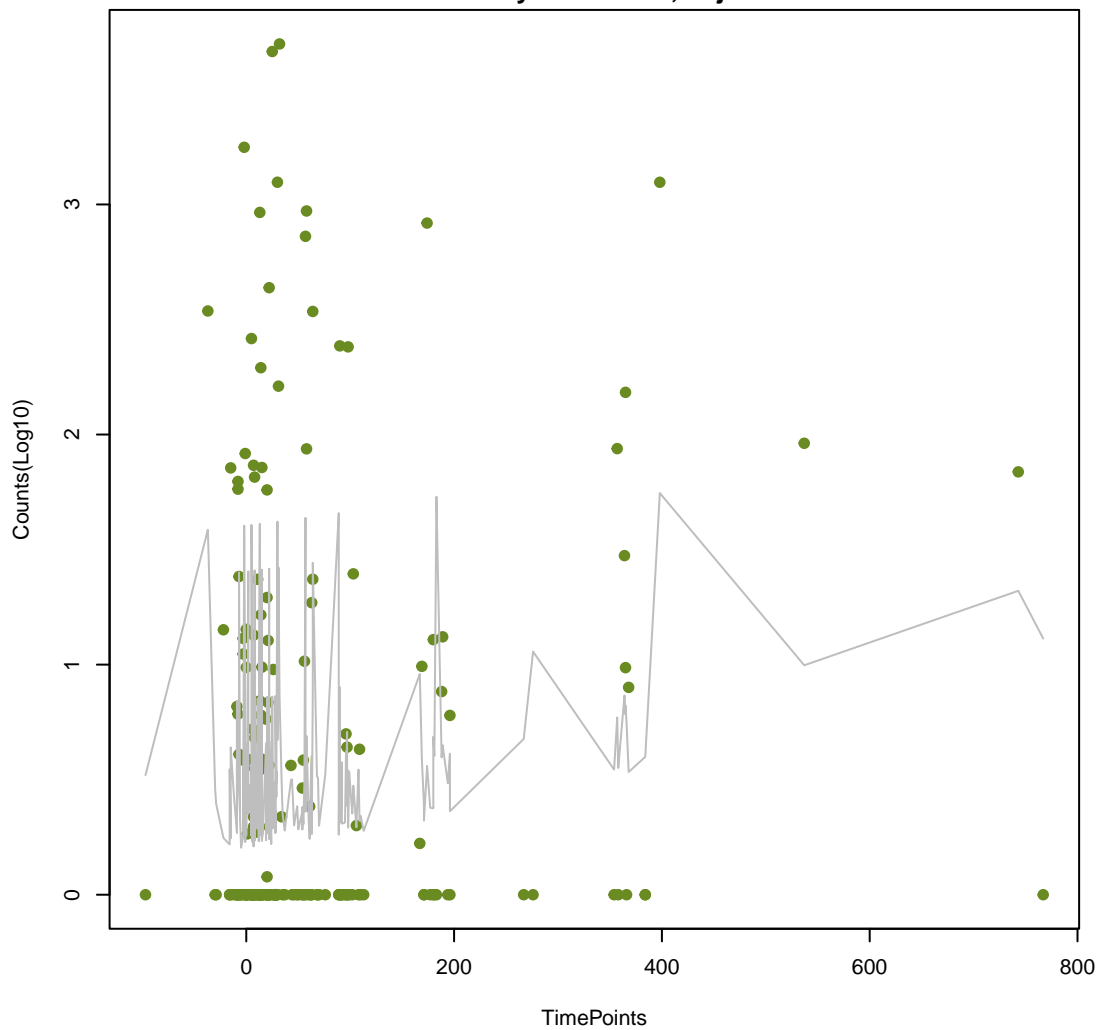
**PME beta-lactamase**  
ANOVA P=0.131, adj. ANOVA-P=0.423  
Line vs. Poly F-P=0.0924, adj. F-P=0.739



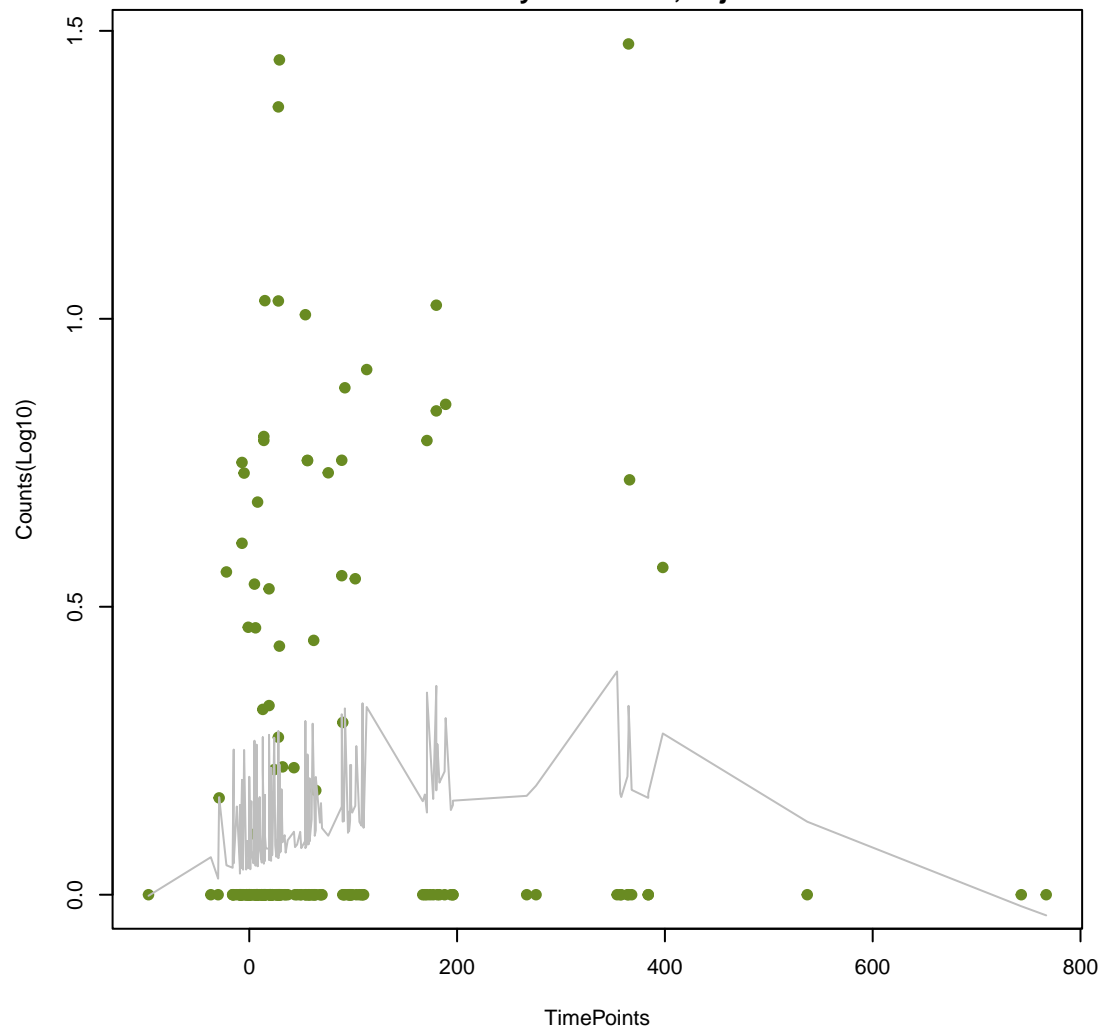
**quinolone resistance protein (qnr)**  
ANOVA P=0.132, adj. ANOVA-P=0.423  
Line vs. Poly F-P=0.693, adj. F-P=1



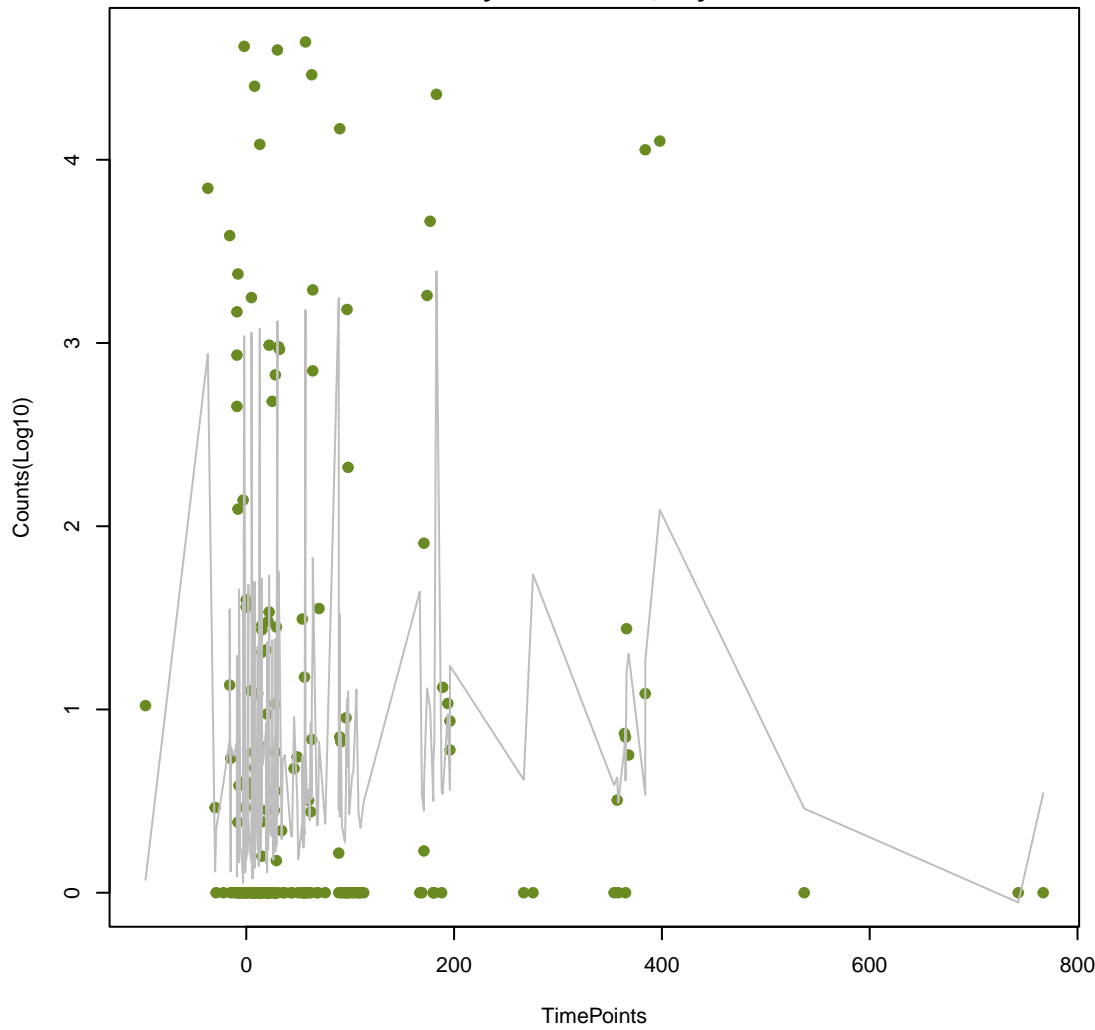
**APH(6)**  
ANOVA P=0.137, adj. ANOVA-P=0.423  
Line vs. Poly F-P=0.803, adj. F-P=1



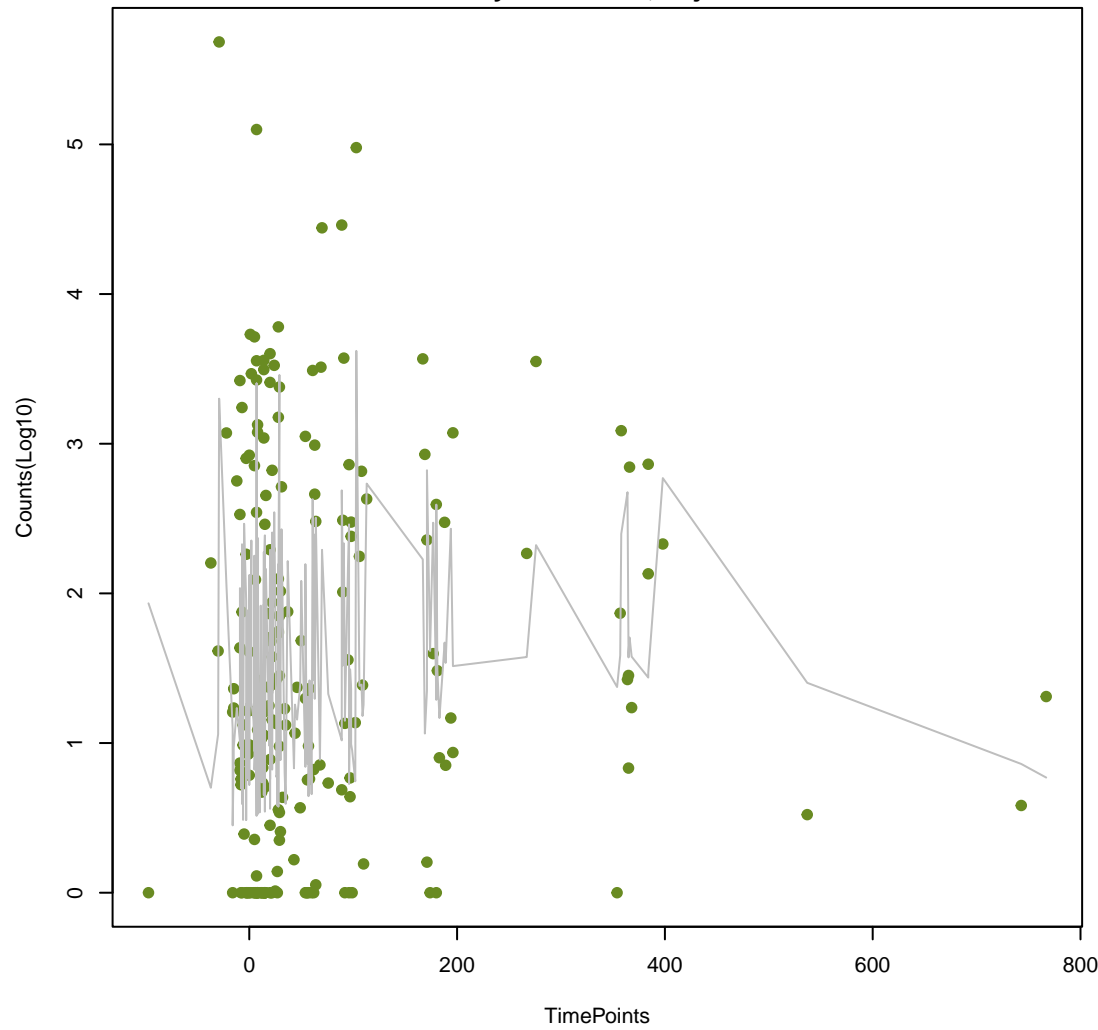
**LEN beta-lactamase**  
ANOVA P=0.139, adj. ANOVA-P=0.423  
Line vs. Poly F-P=0.461, adj. F-P=1



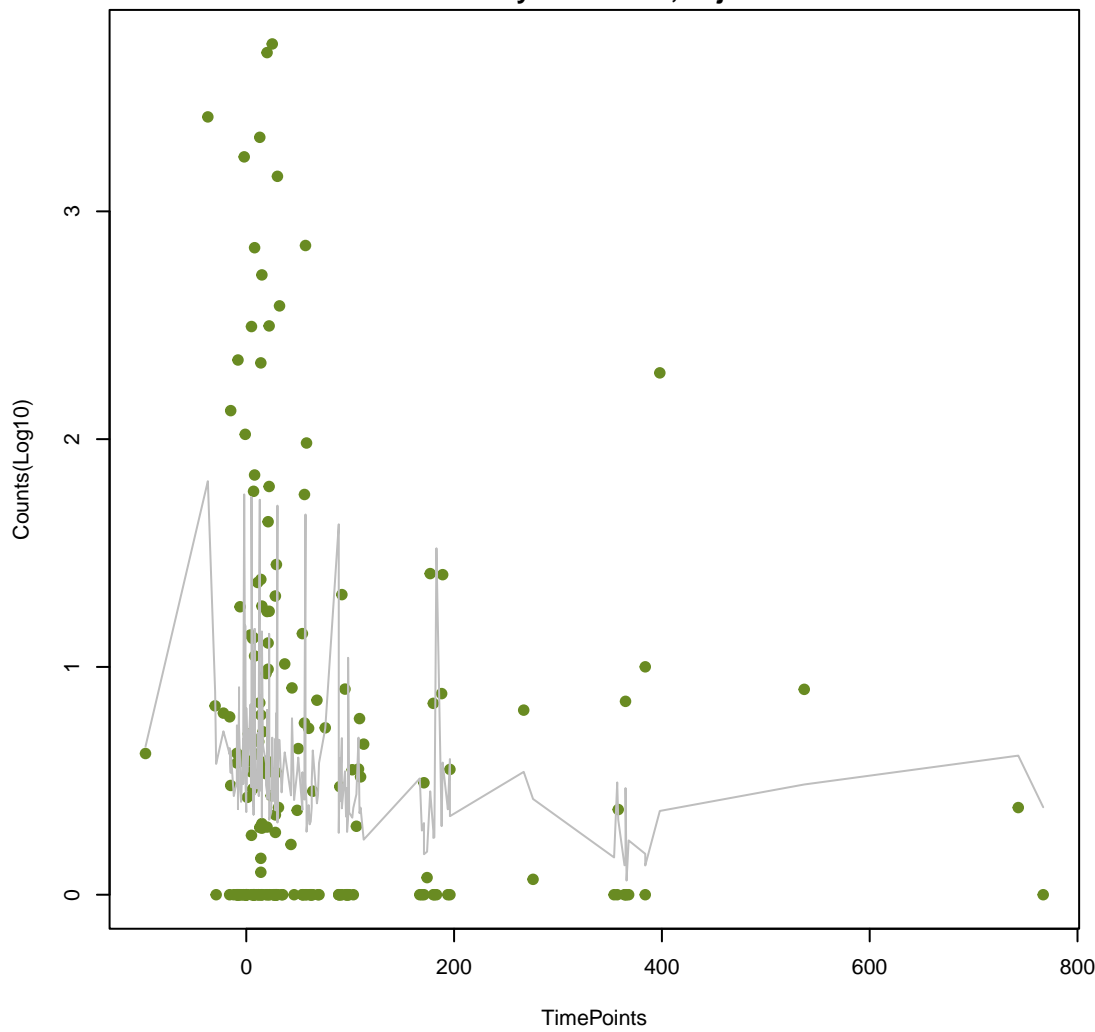
**EC beta-lactamase**  
ANOVA P=0.145, adj. ANOVA-P=0.426  
Line vs. Poly F-P=0.0543, adj. F-P=0.624



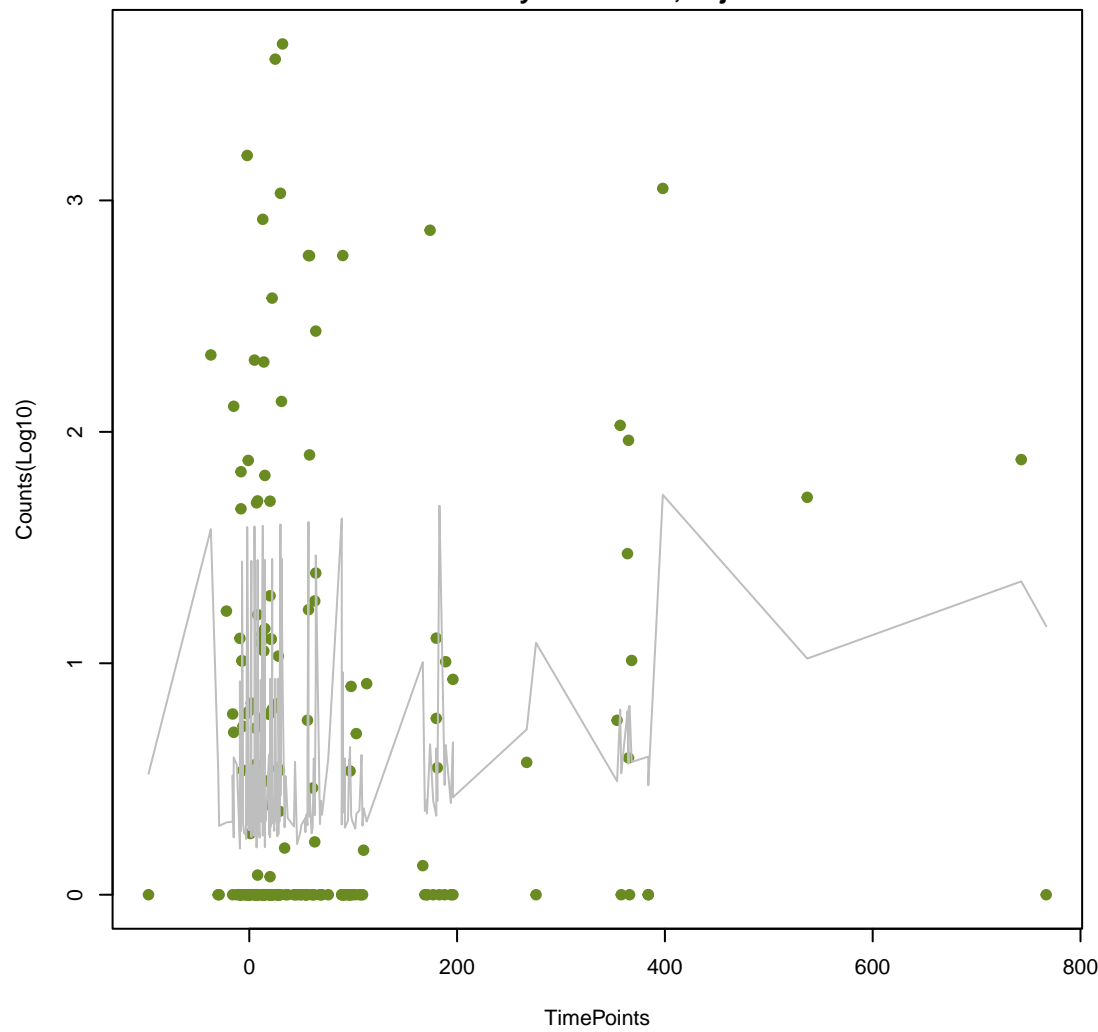
**glycopeptide resistance gene cluster;vanY**  
ANOVA P=0.153, adj. ANOVA-P=0.436  
Line vs. Poly F-P=0.108, adj. F-P=0.739



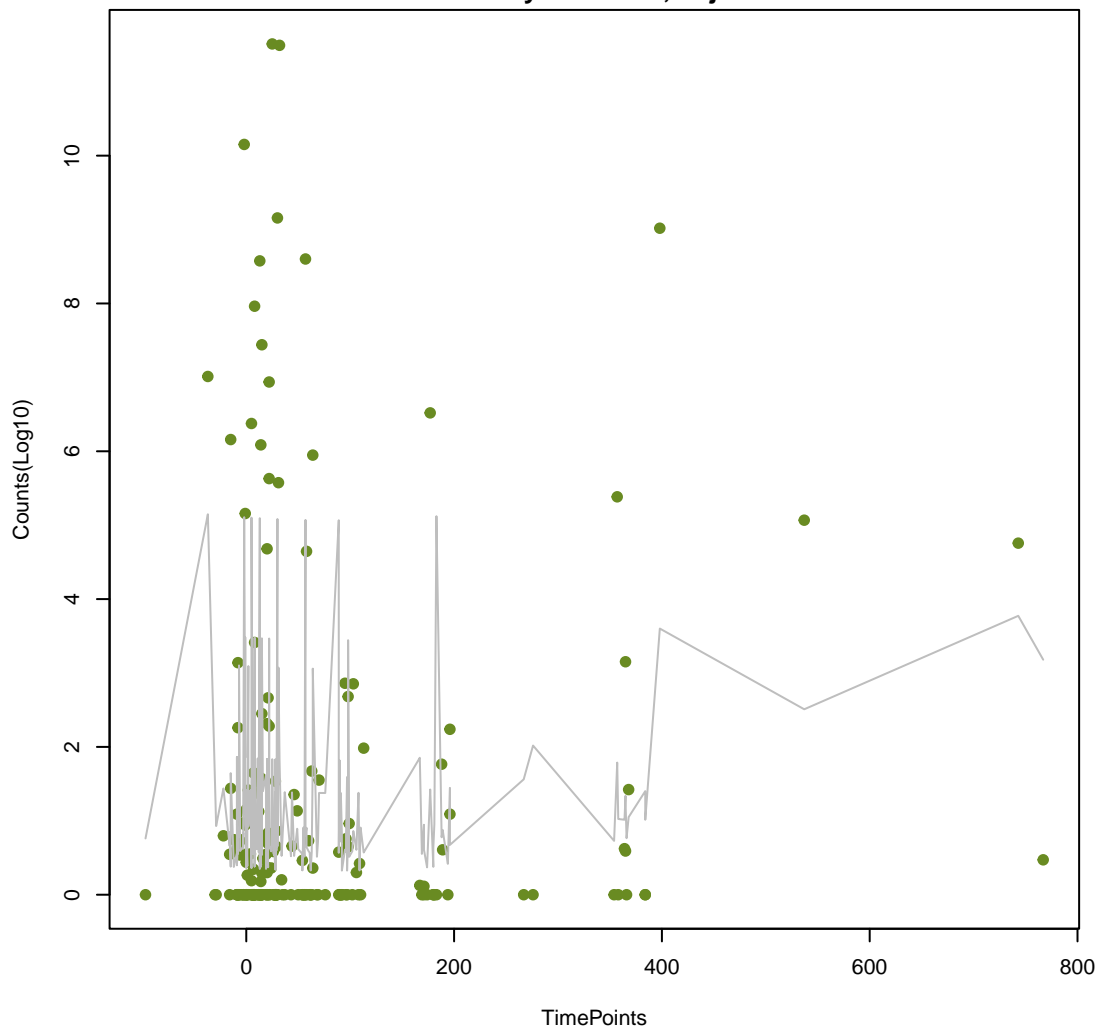
**macrolide phosphotransferase (MPH)**  
ANOVA P=0.17, adj. ANOVA-P=0.468  
Line vs. Poly F-P=0.411, adj. F-P=1



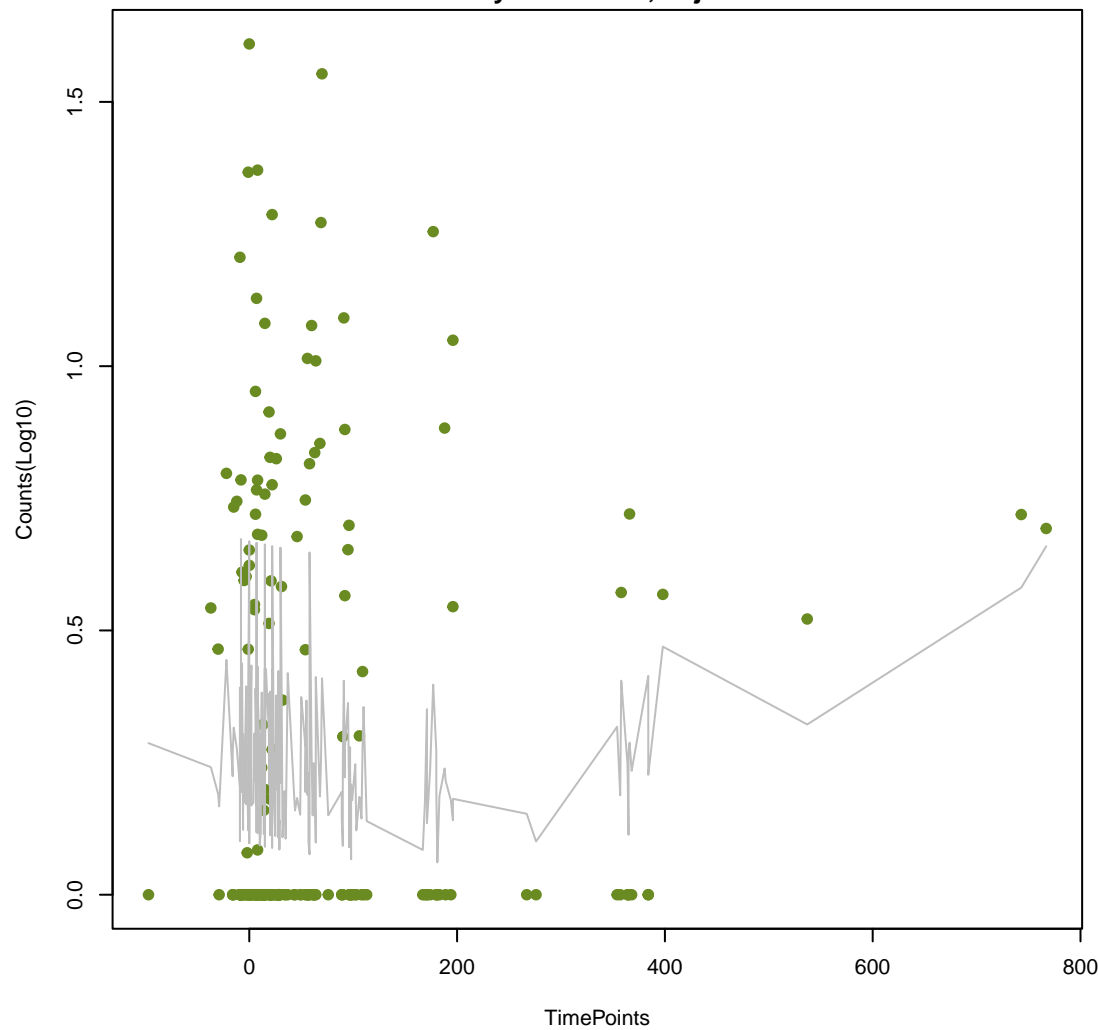
**APH(3'')**  
ANOVA P=0.179, adj. ANOVA-P=0.471  
Line vs. Poly F-P=0.624, adj. F-P=1



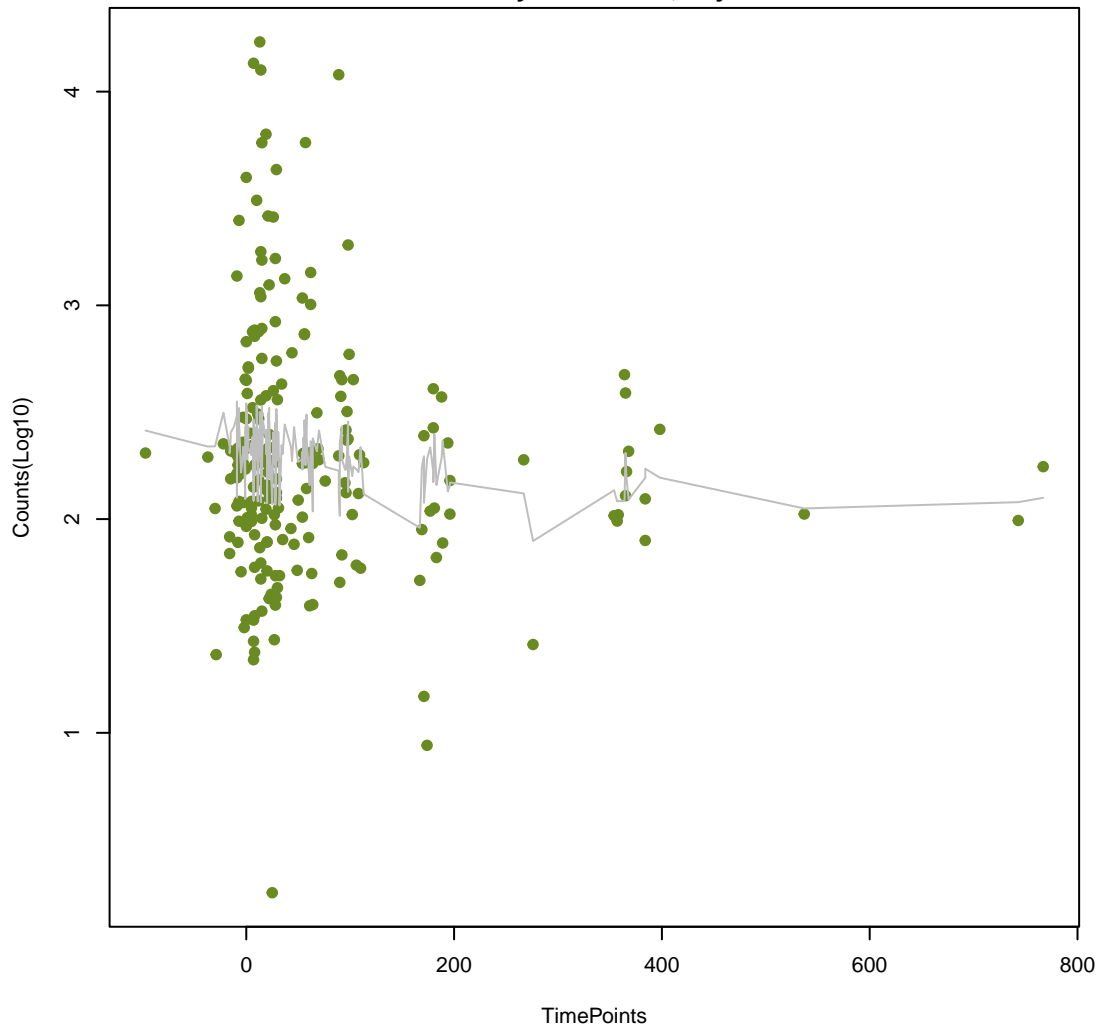
**TEM beta-lactamase**  
ANOVA P=0.181, adj. ANOVA-P=0.471  
Line vs. Poly F-P=0.27, adj. F-P=1



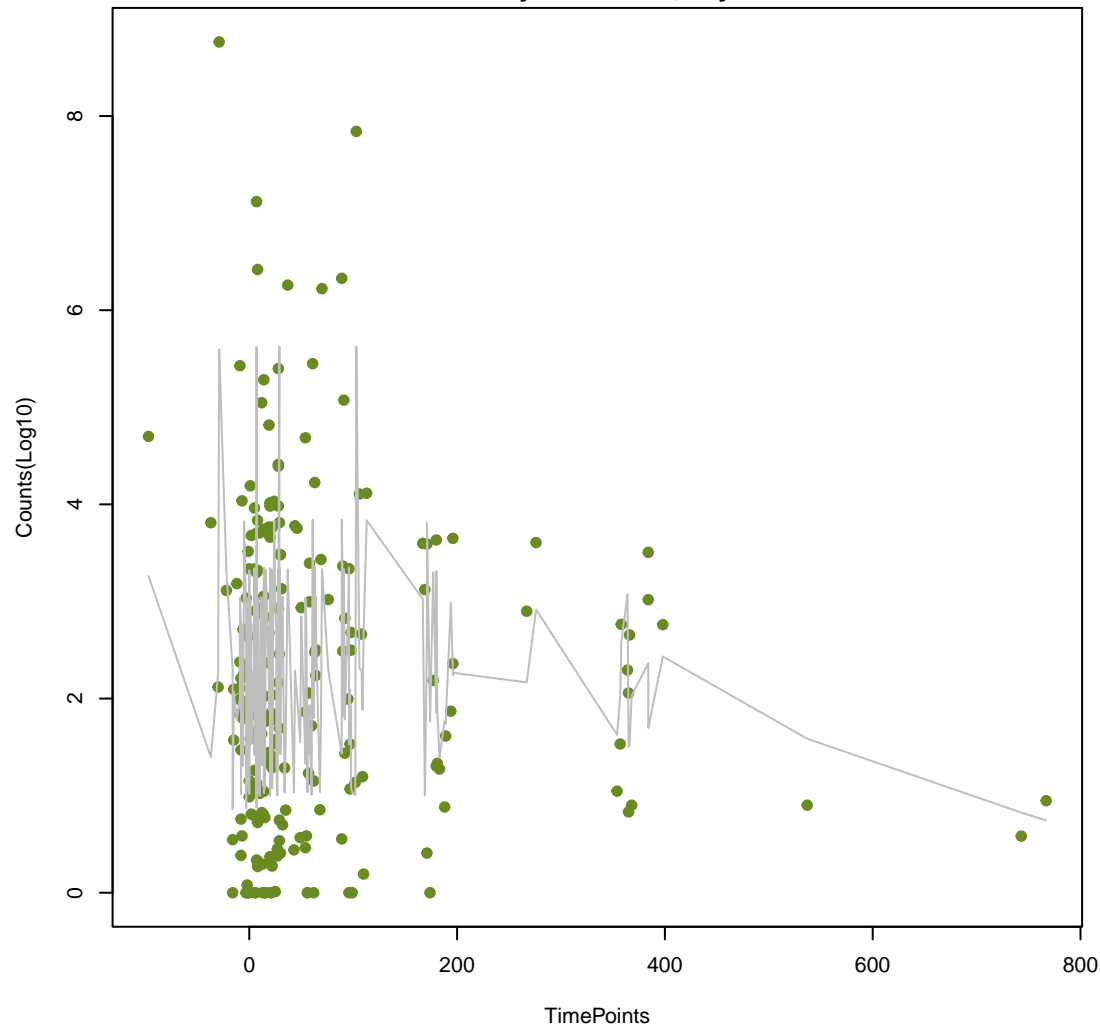
**16S rRNA methyltransferase (G1405)**  
ANOVA P=0.215, adj. ANOVA-P=0.544  
Line vs. Poly F-P=0.126, adj. F-P=0.739



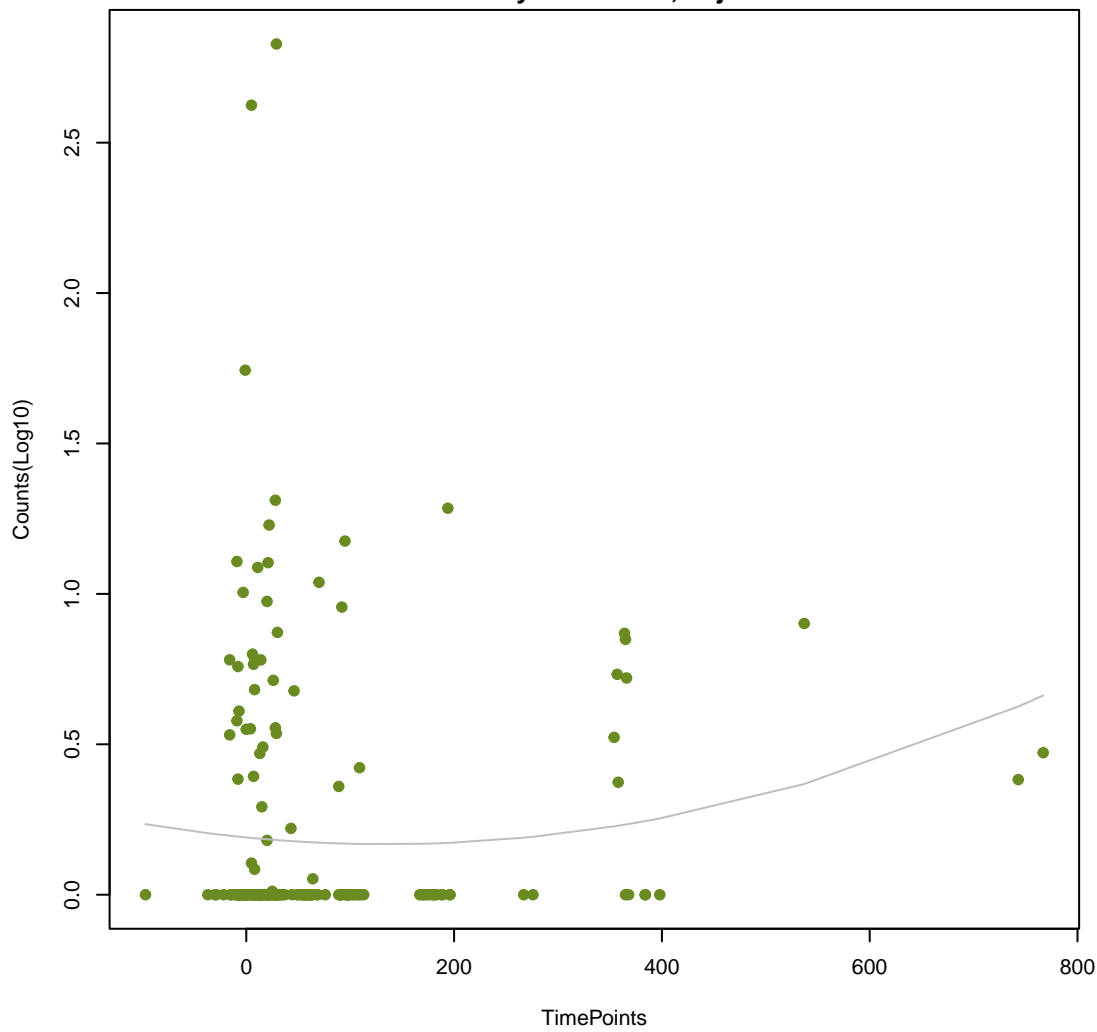
**Bleomycin resistant protein**  
ANOVA P=0.239, adj. ANOVA-P=0.585  
Line vs. Poly F-P=0.425, adj. F-P=1



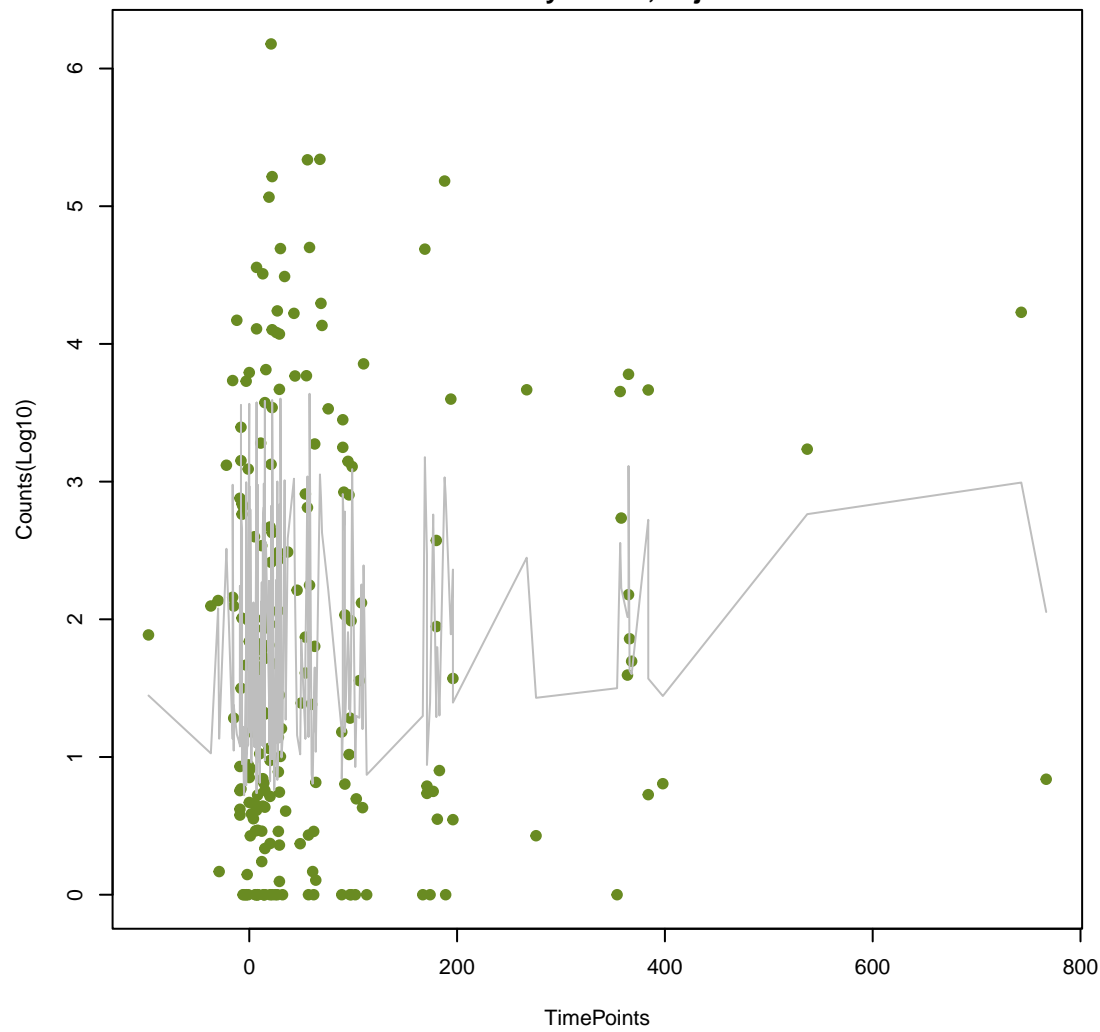
**glycopeptide resistance gene cluster;vanS**  
ANOVA P=0.244, adj. ANOVA-P=0.585  
Line vs. Poly F-P=0.361, adj. F-P=1



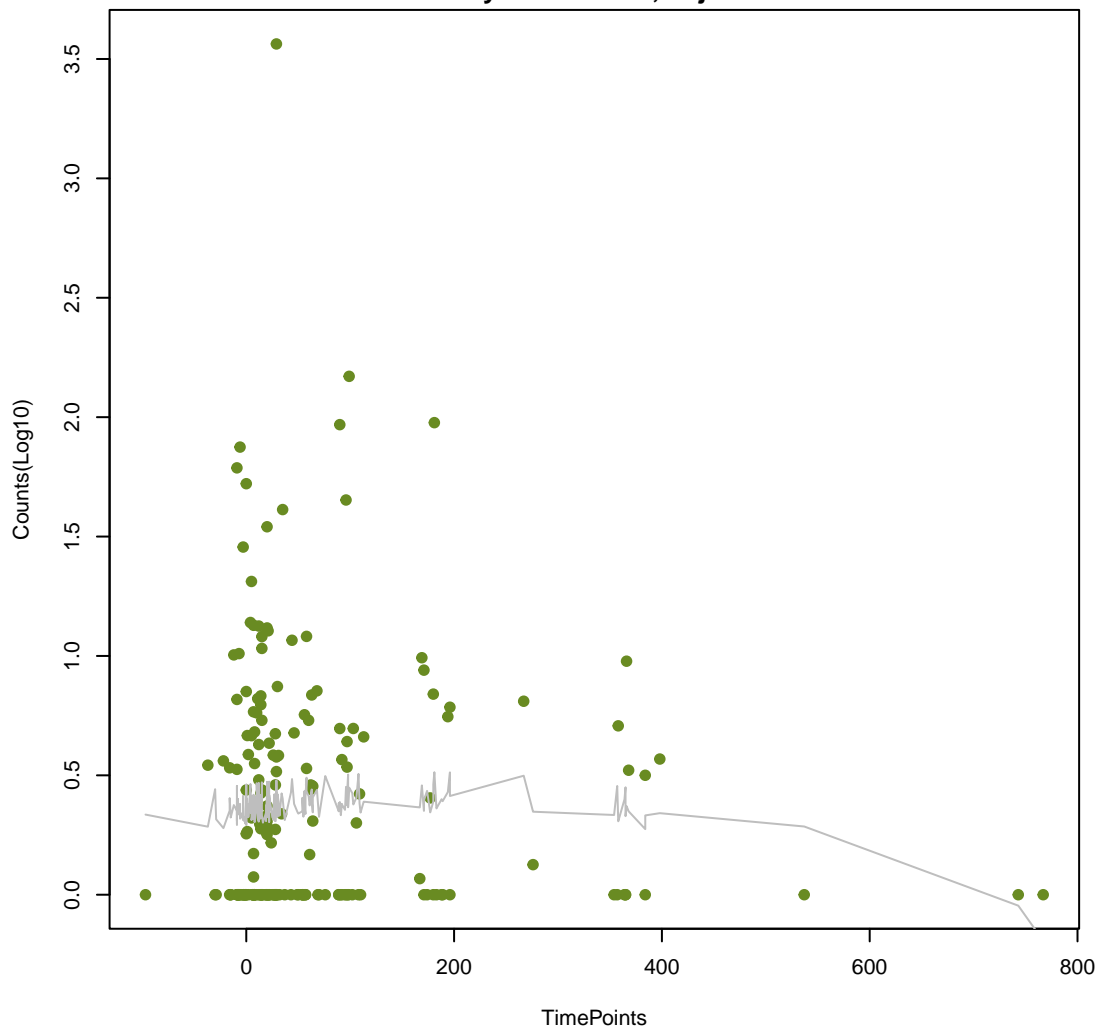
**Outer Membrane Porin (Opr);resistance-nodulation-cell division (RND) antibiotic efflux**  
ANOVA P=0.252, adj. ANOVA-P=0.587  
Line vs. Poly F-P=0.222, adj. F-P=1



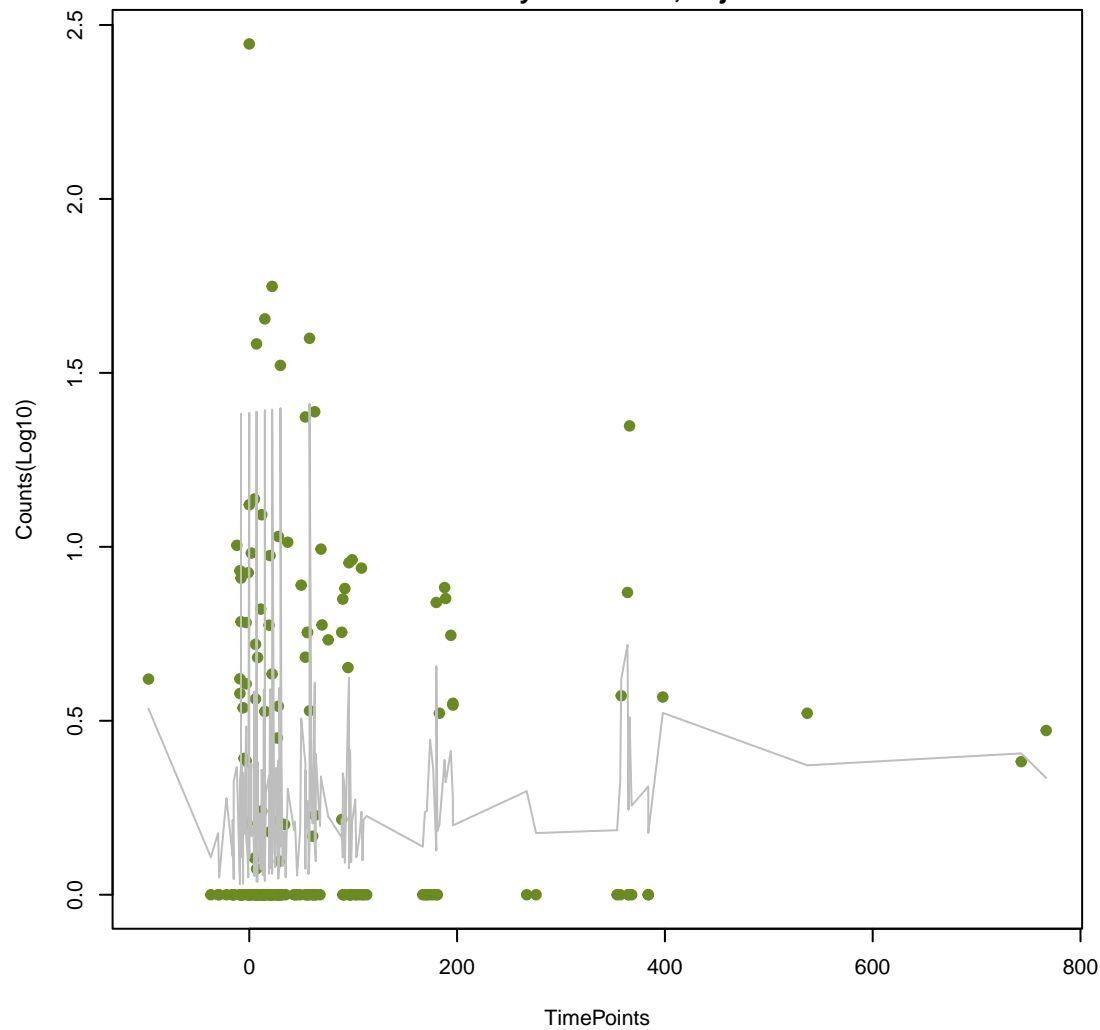
**antibiotic-resistant isoleucyl-tRNA synthetase (ileS)**  
ANOVA P=0.275, adj. ANOVA-P=0.604  
Line vs. Poly F-P=1, adj. F-P=1



**defensin resistant mprF**  
ANOVA P=0.276, adj. ANOVA-P=0.604  
Line vs. Poly F-P=0.0685, adj. F-P=0.624

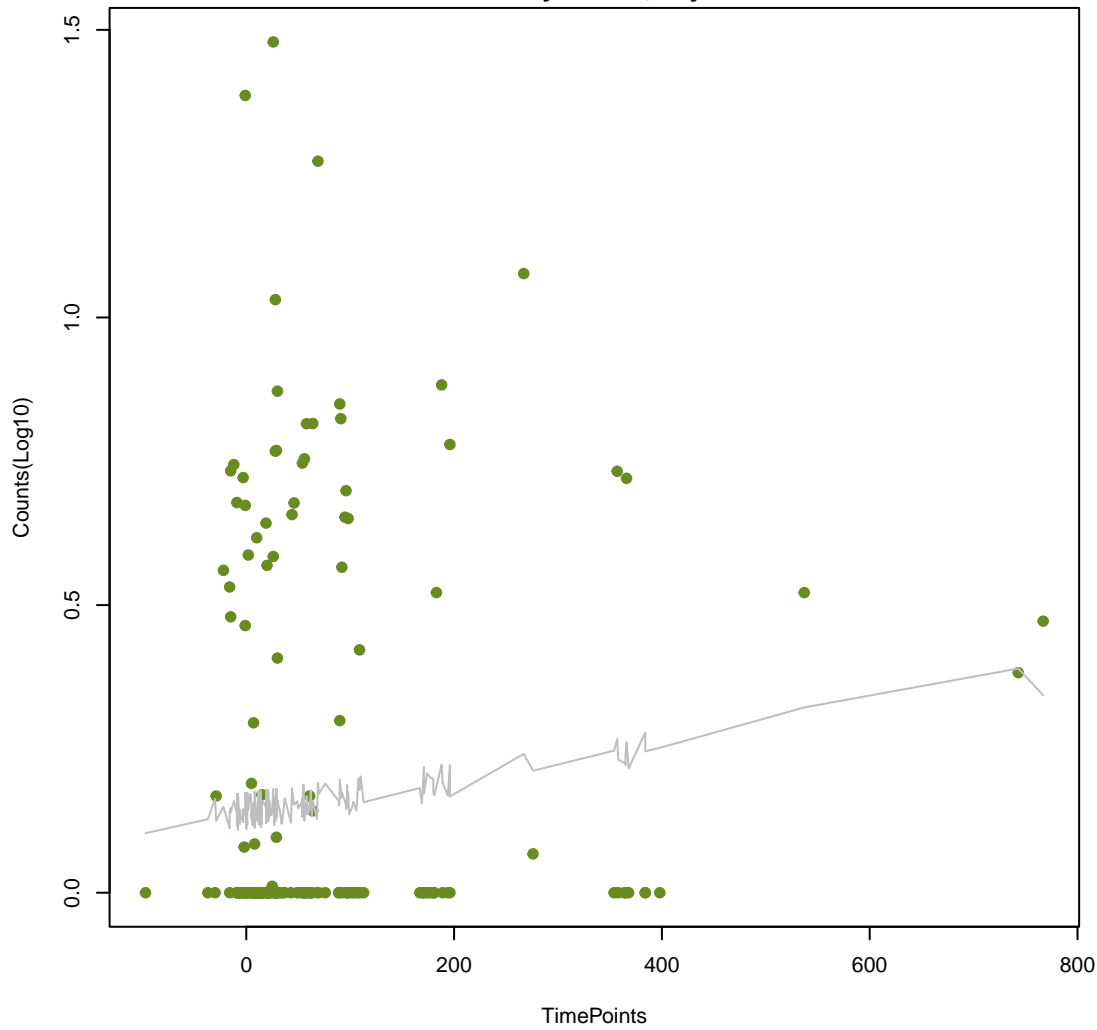


**subclass B3 PEDO beta-lactamase**  
ANOVA P=0.279, adj. ANOVA-P=0.604  
Line vs. Poly F-P=0.809, adj. F-P=1

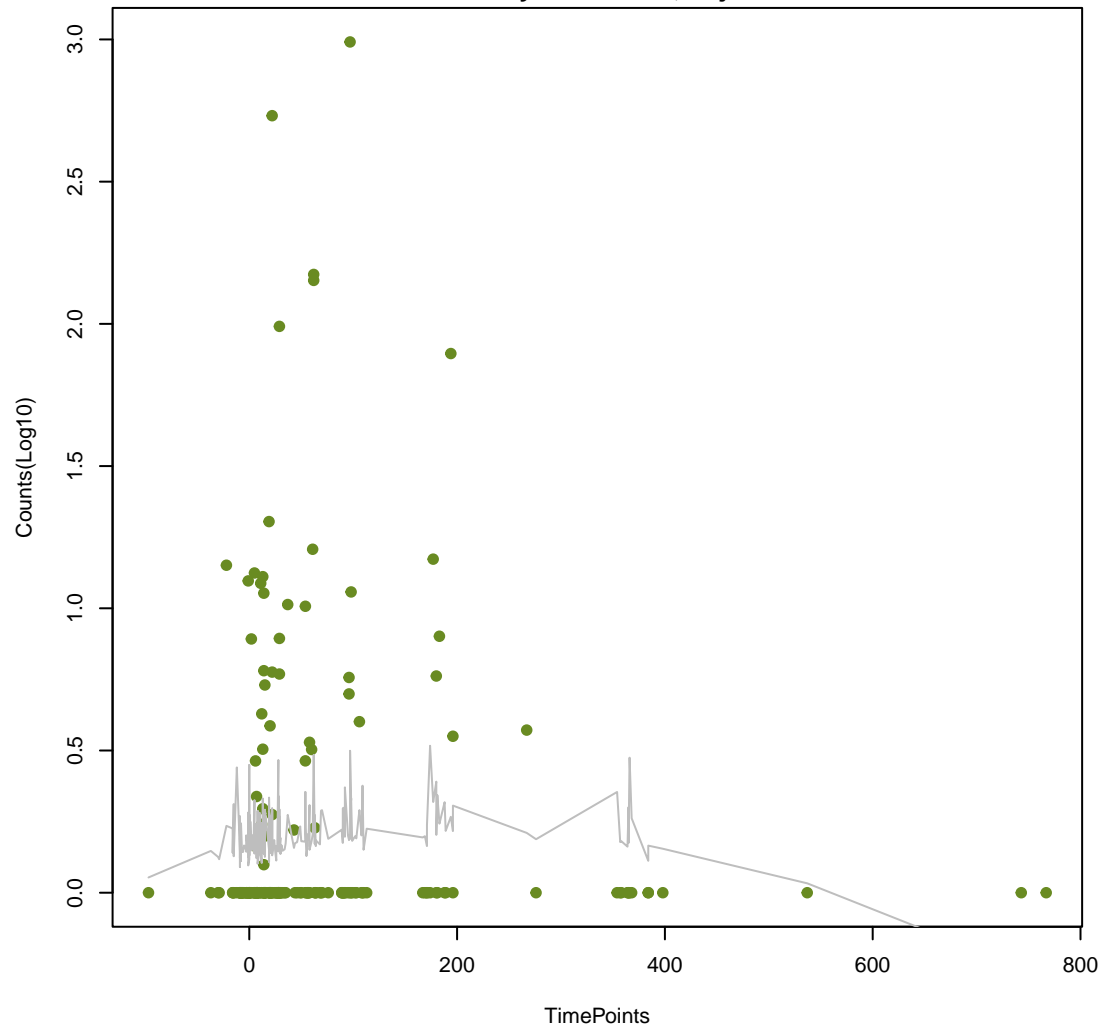




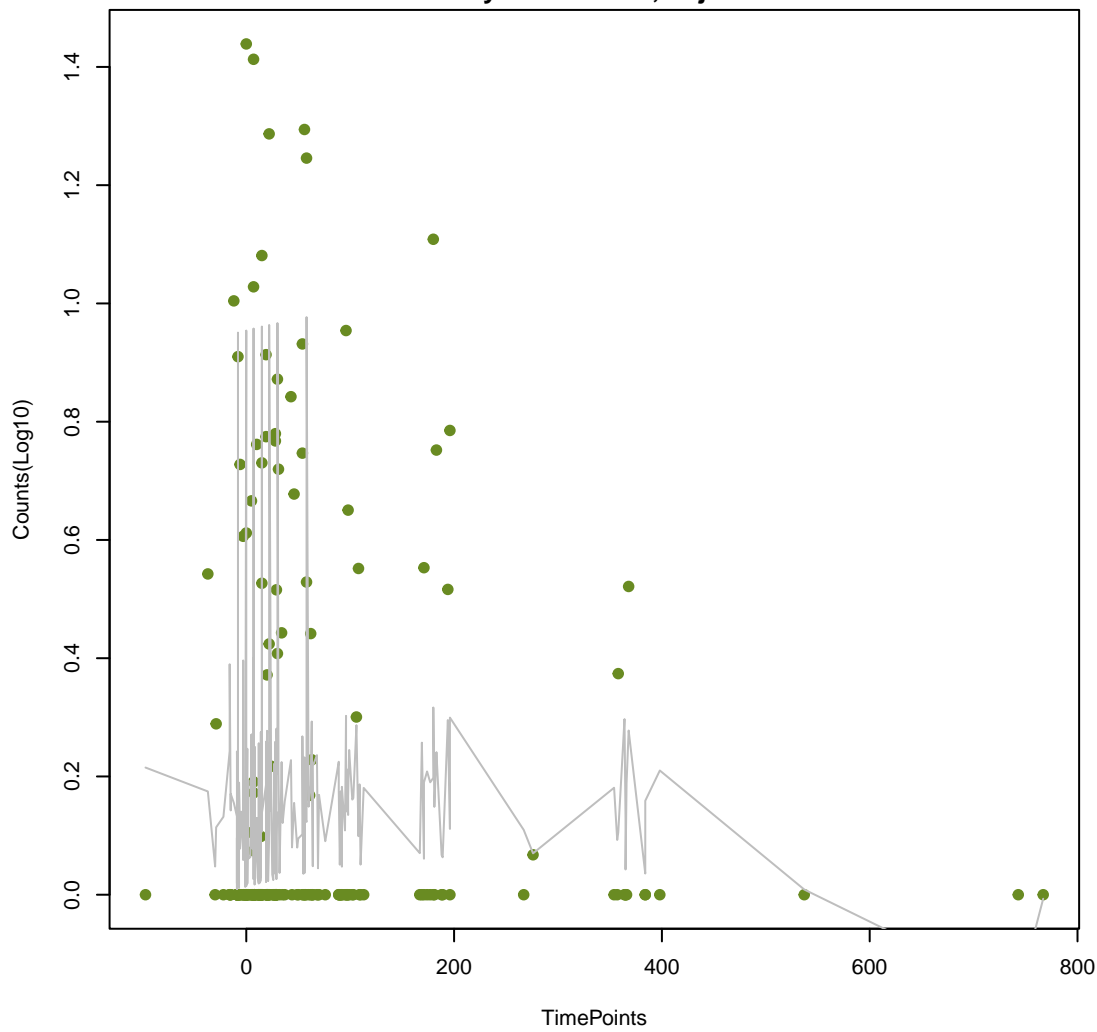
**RSA beta-lactamase**  
ANOVA P=0.305, adj. ANOVA-P=0.615  
Line vs. Poly F-P=1, adj. F-P=1



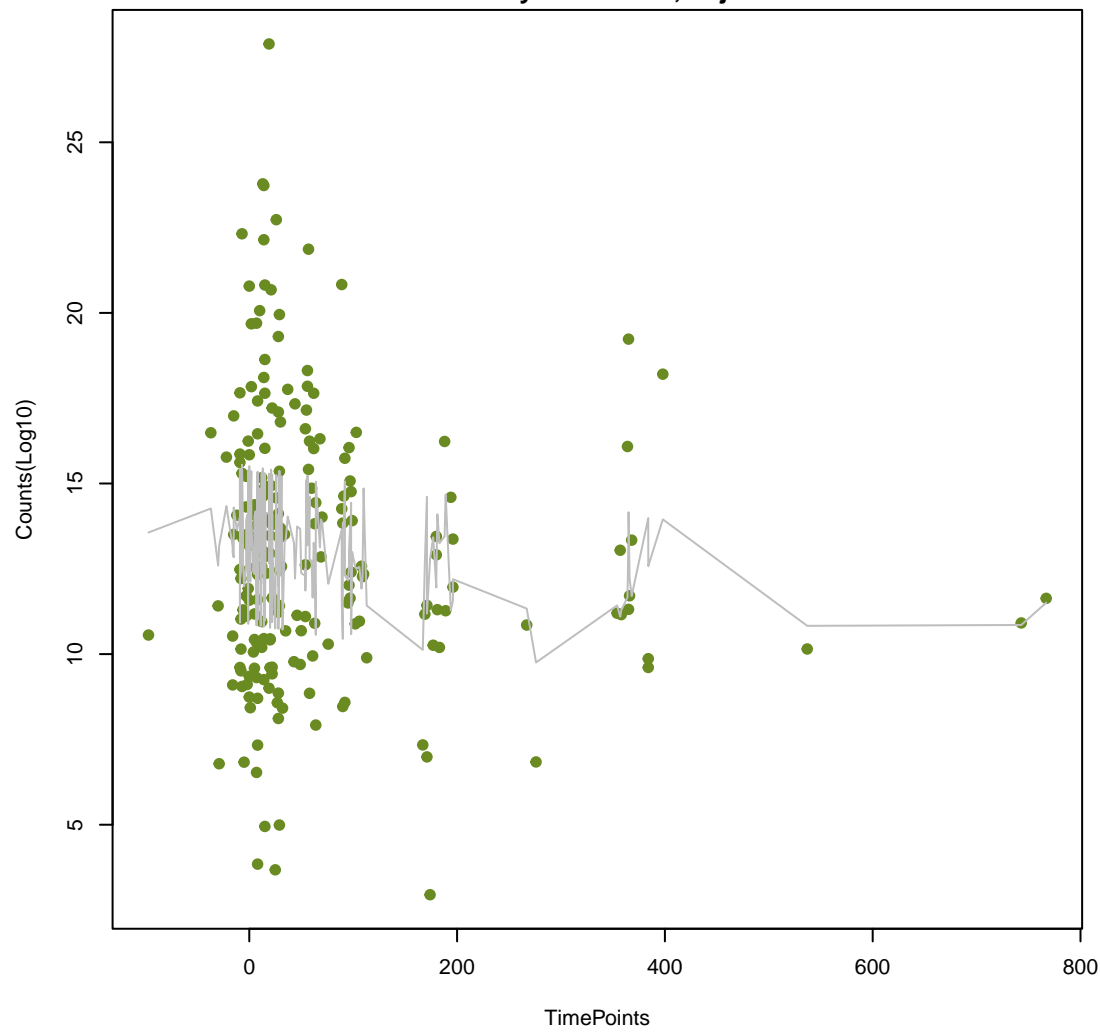
**fosfomycin thiol transferase**  
ANOVA P=0.306, adj. ANOVA-P=0.615  
Line vs. Poly F-P=0.362, adj. F-P=1



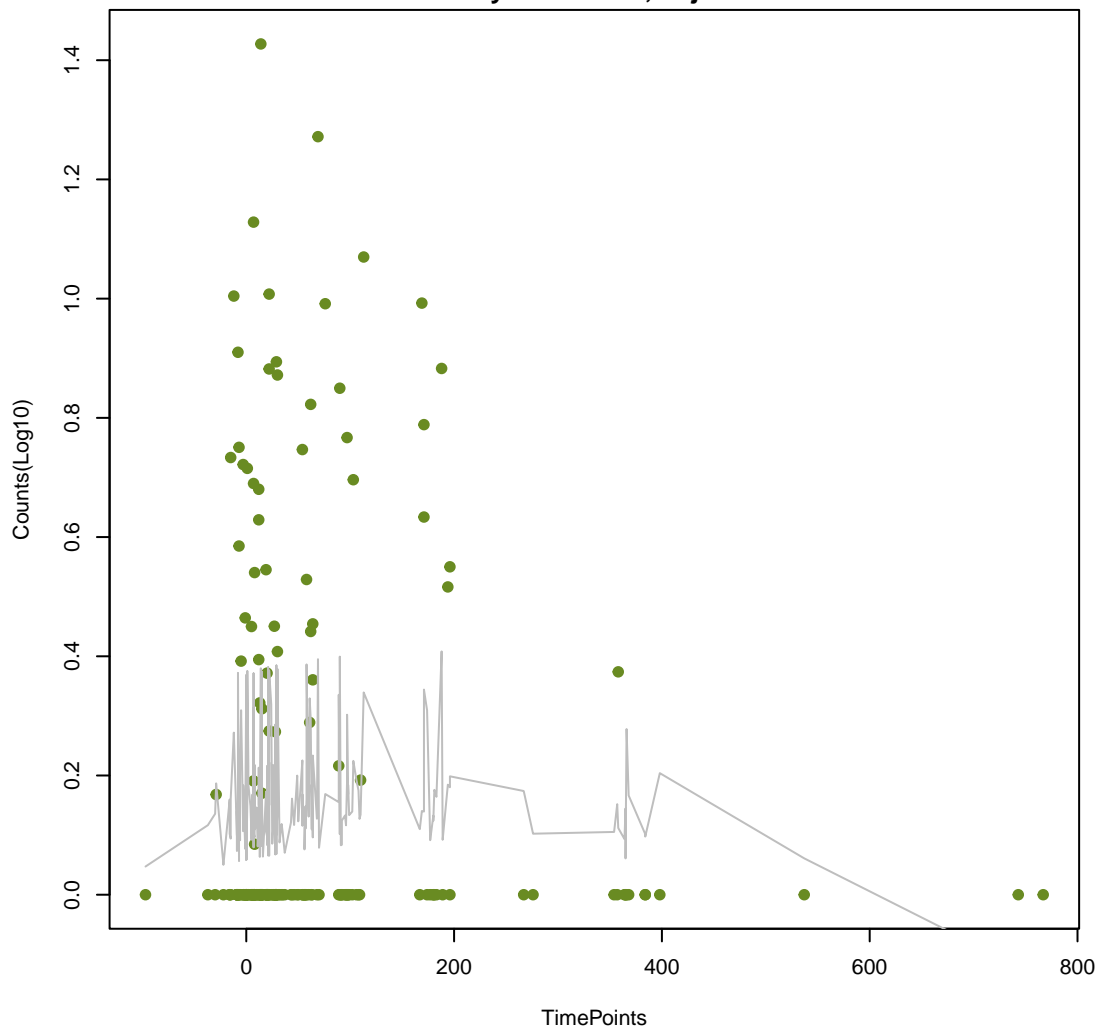
**Bah amidohydrolase**  
ANOVA P=0.309, adj. ANOVA-P=0.615  
Line vs. Poly F-P=0.0685, adj. F-P=0.624



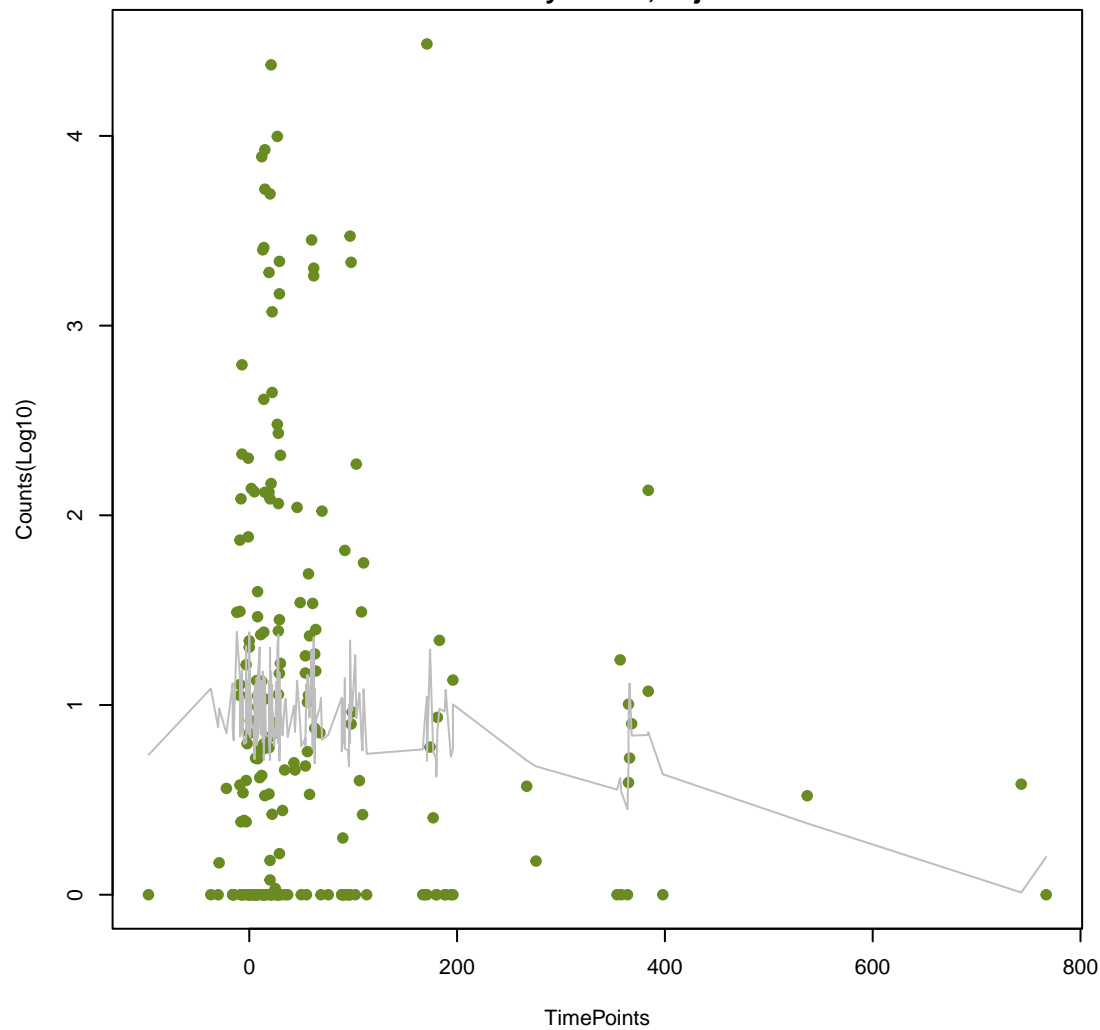
**trimethoprim resistant dihydrofolate reductase dfr**  
ANOVA P=0.311, adj. ANOVA-P=0.615  
Line vs. Poly F-P=0.538, adj. F-P=1



**ERP beta-lactamase**  
ANOVA P=0.319, adj. ANOVA-P=0.618  
Line vs. Poly F-P=0.138, adj. F-P=0.739

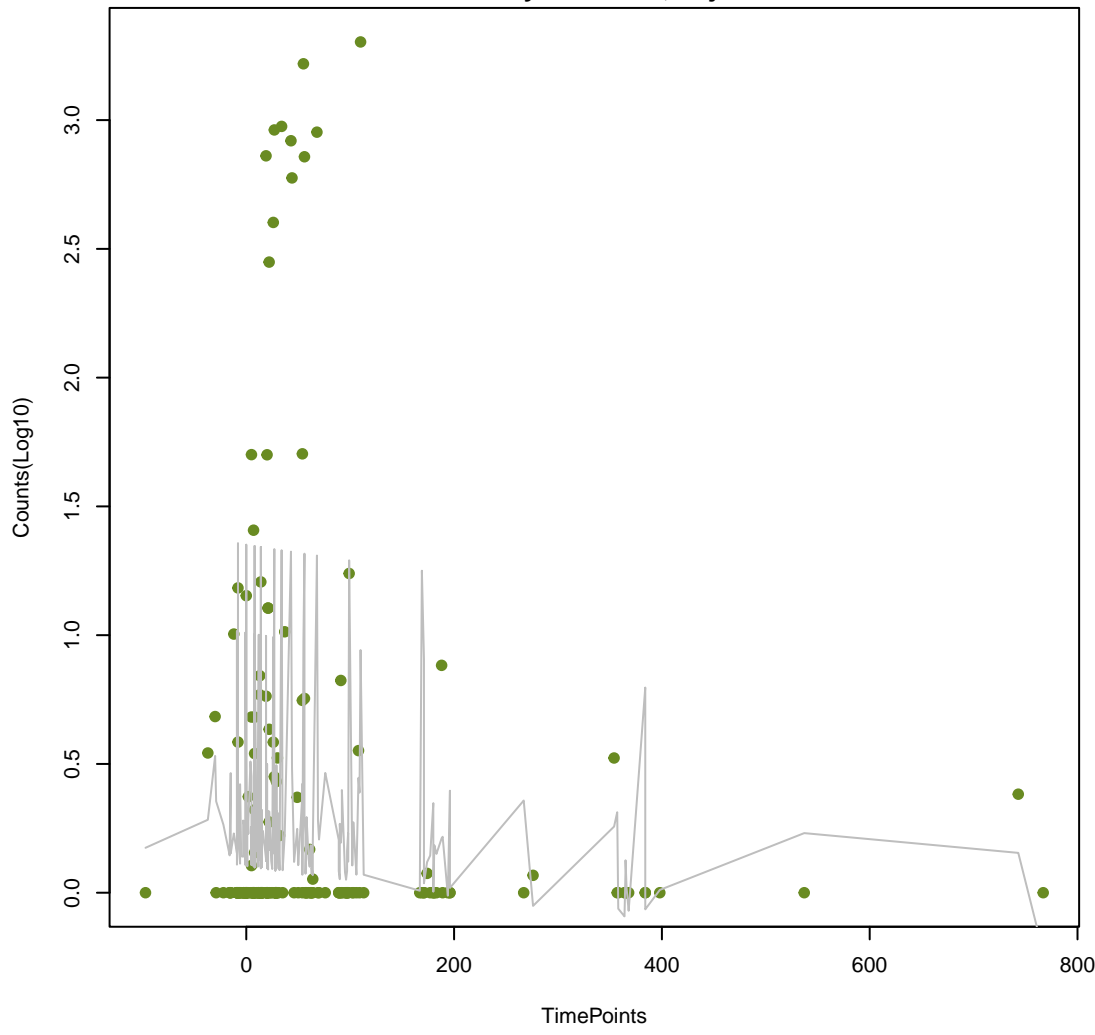


**multidrug and toxic compound extrusion (MATE) transporter**  
ANOVA P=0.352, adj. ANOVA-P=0.651  
Line vs. Poly F-P=1, adj. F-P=1

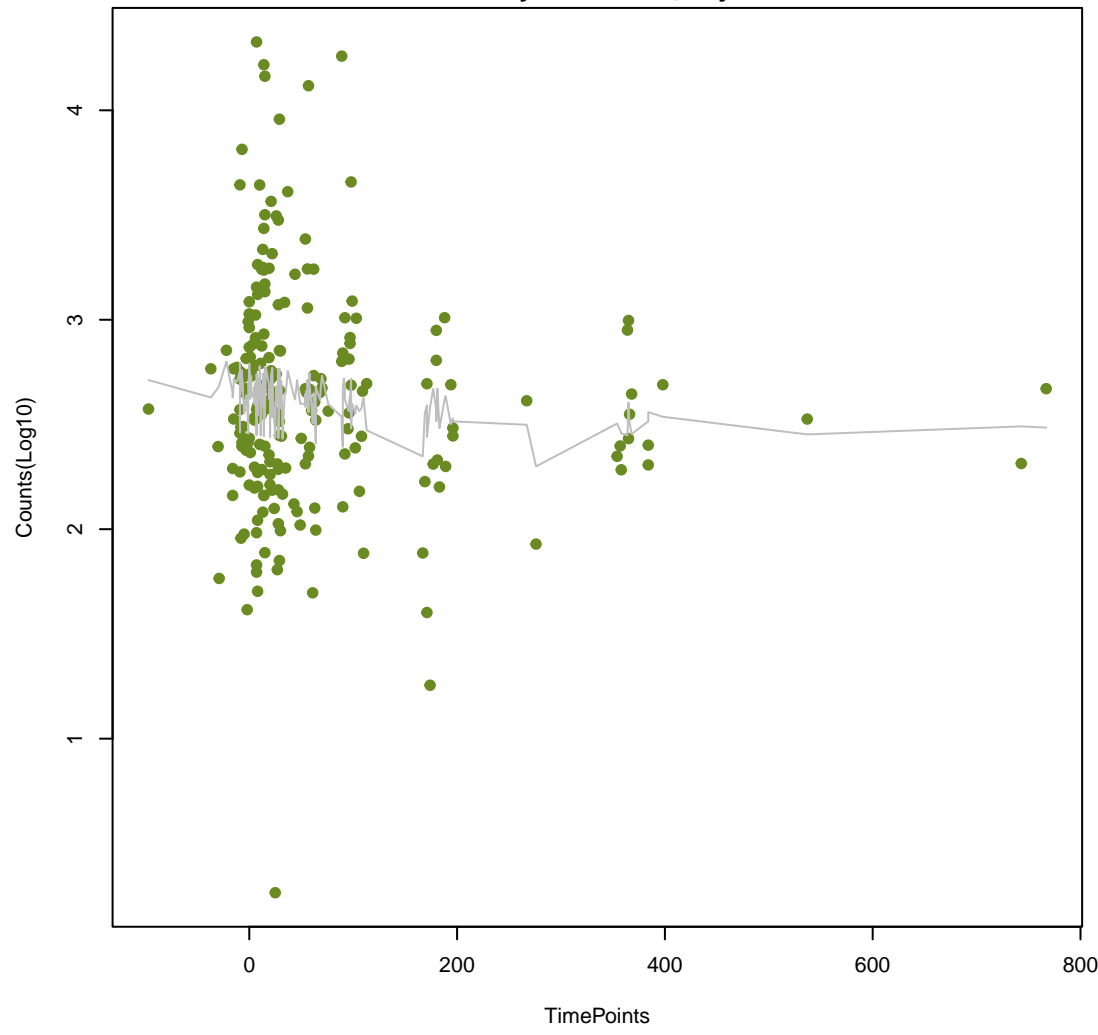




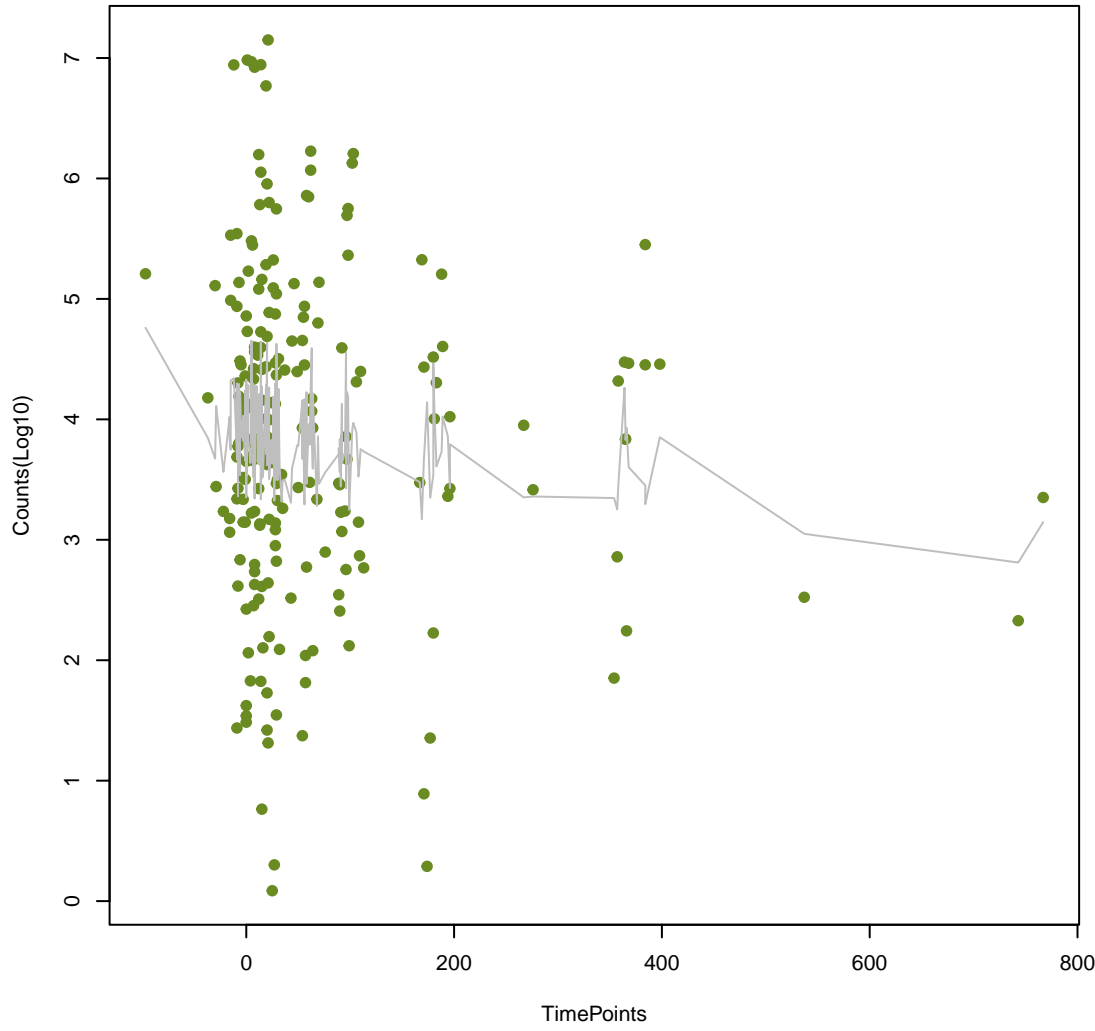
**ANT(4')**  
ANOVA P=0.356, adj. ANOVA-P=0.651  
Line vs. Poly F-P=0.94, adj. F-P=1



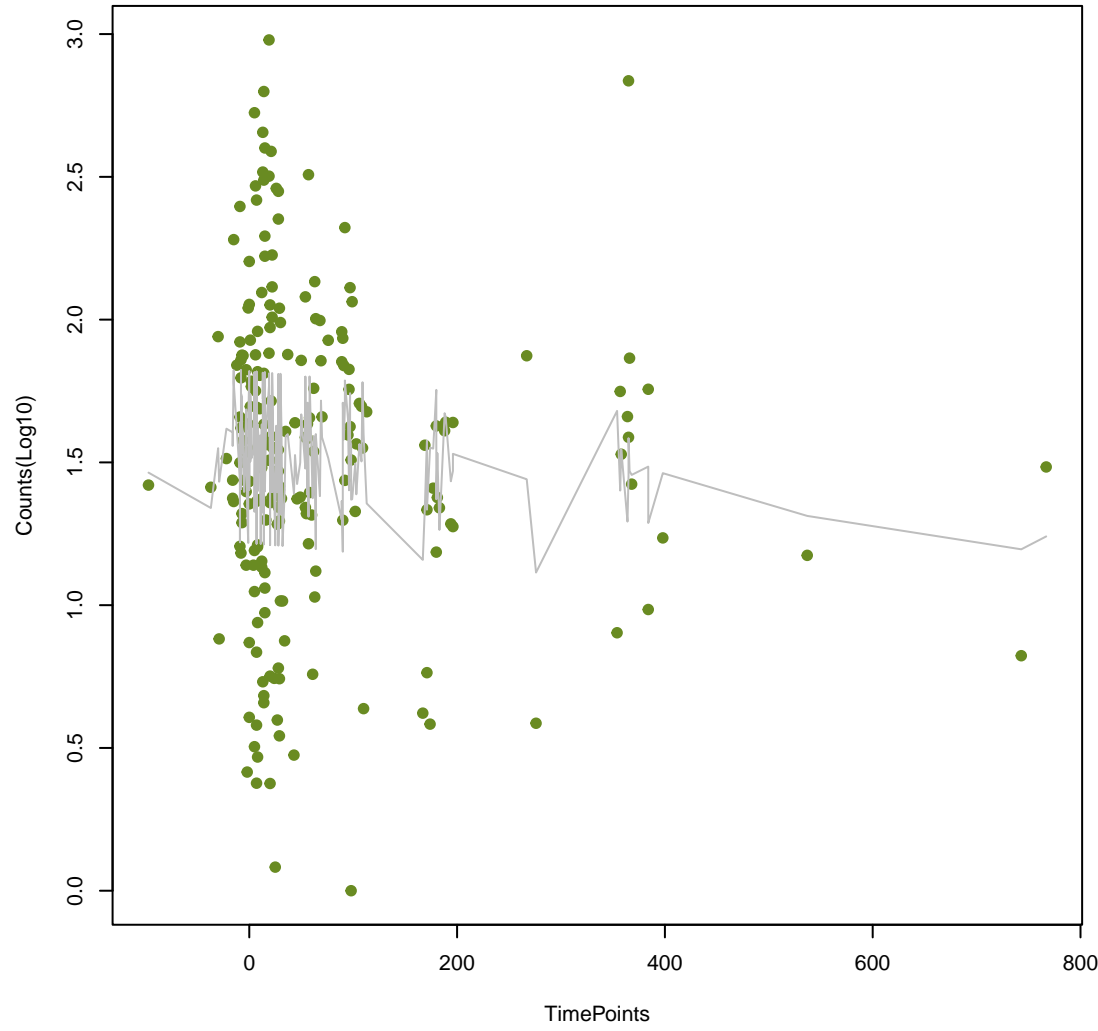
**RbpA bacterial RNA polymerase-binding protein**  
ANOVA P=0.358, adj. ANOVA-P=0.651  
Line vs. Poly F-P=0.492, adj. F-P=1



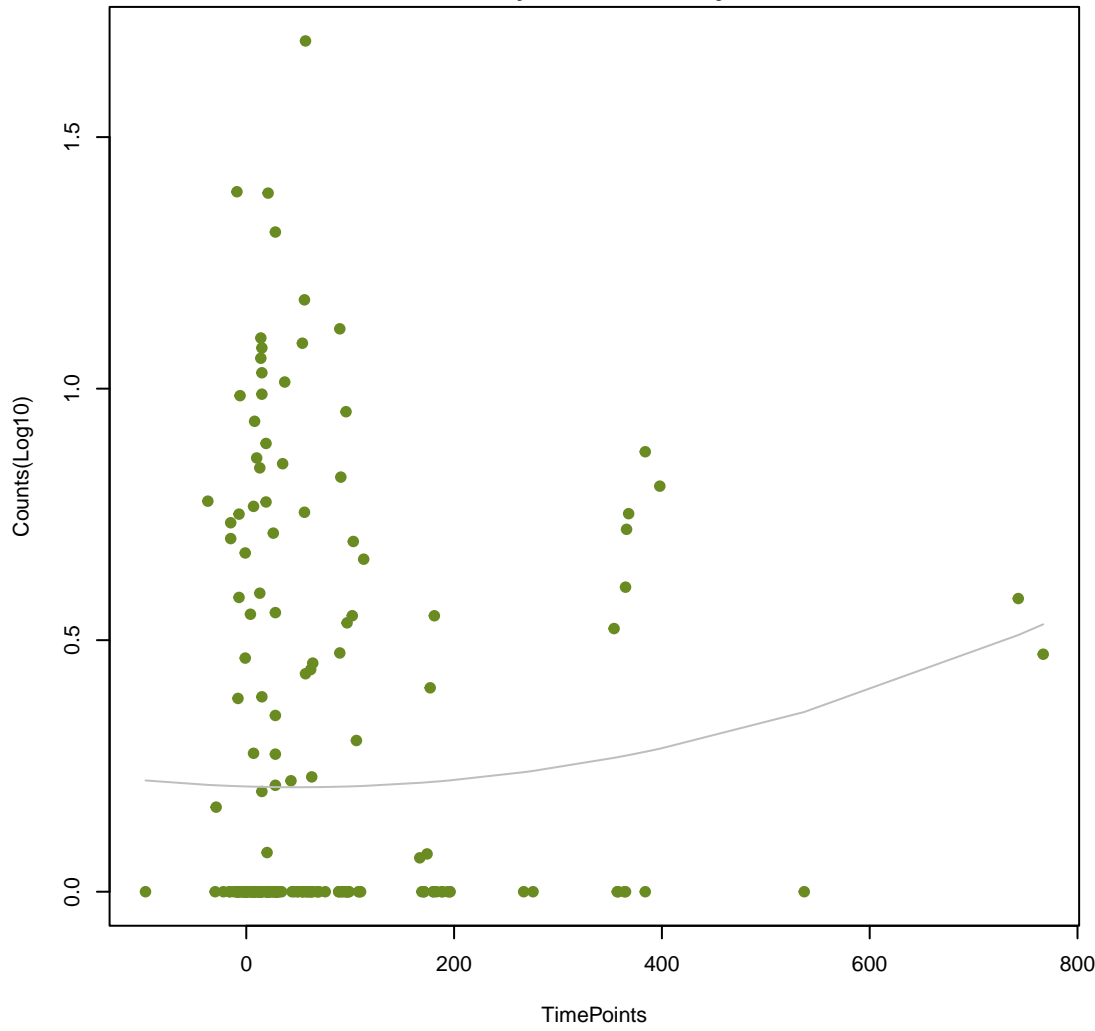
**msr-type ABC-F protein**  
ANOVA P=0.374, adj. ANOVA-P=0.667  
Line vs. Poly F-P=1, adj. F-P=1



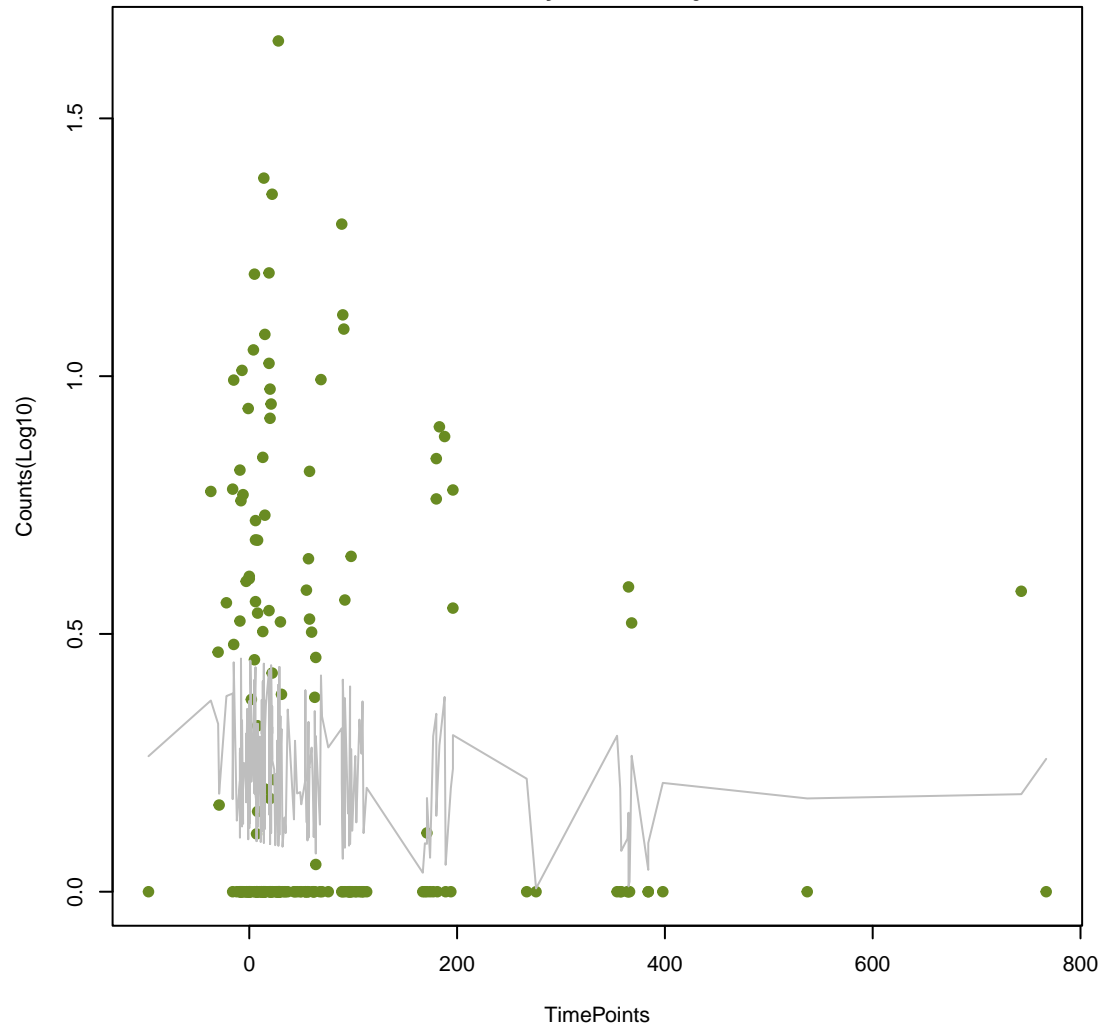
**glycopeptide resistance gene cluster;vanV**  
ANOVA P=0.396, adj. ANOVA-P=0.694  
Line vs. Poly F-P=1, adj. F-P=1



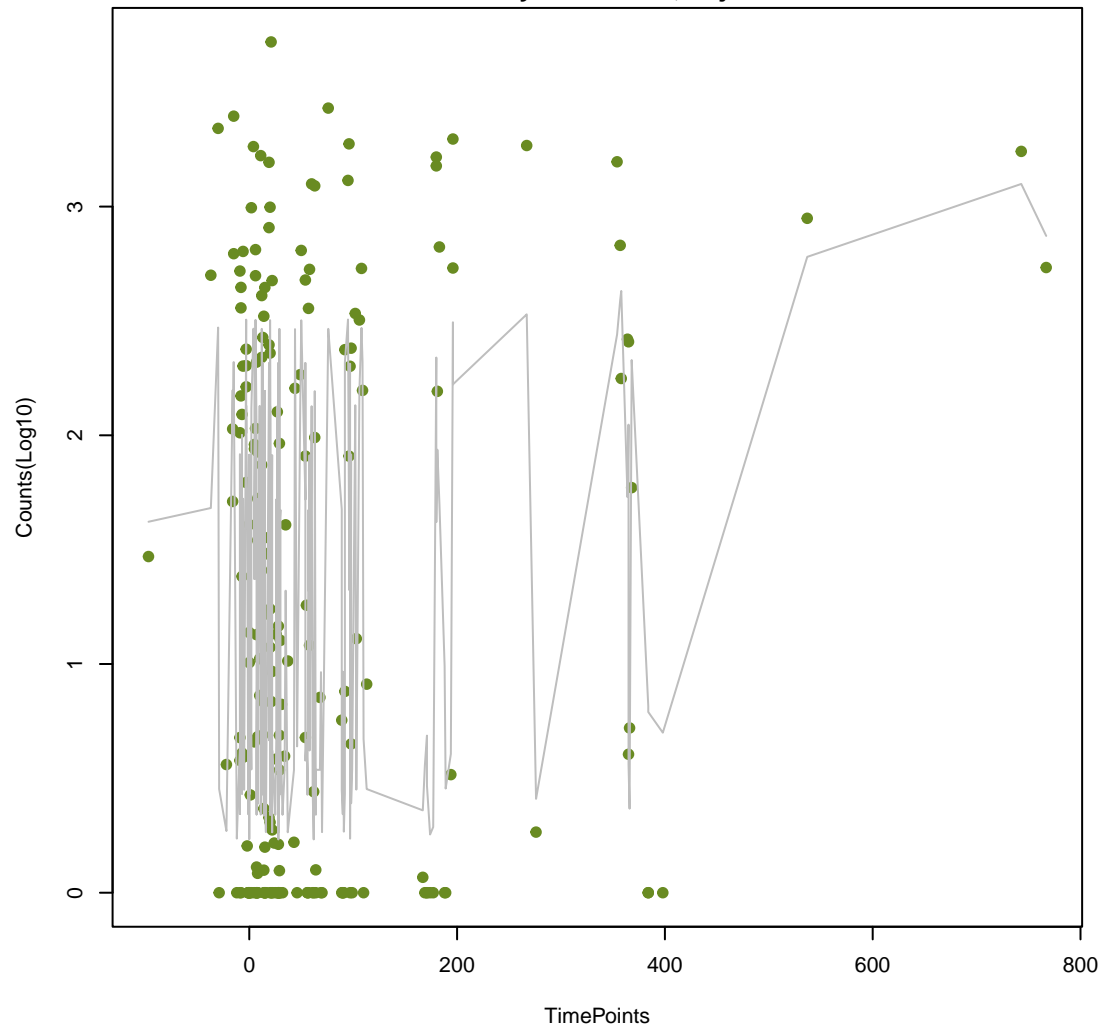
**OKP beta-lactamase**  
ANOVA P=0.406, adj. ANOVA-P=0.697  
Line vs. Poly F-P=0.482, adj. F-P=1



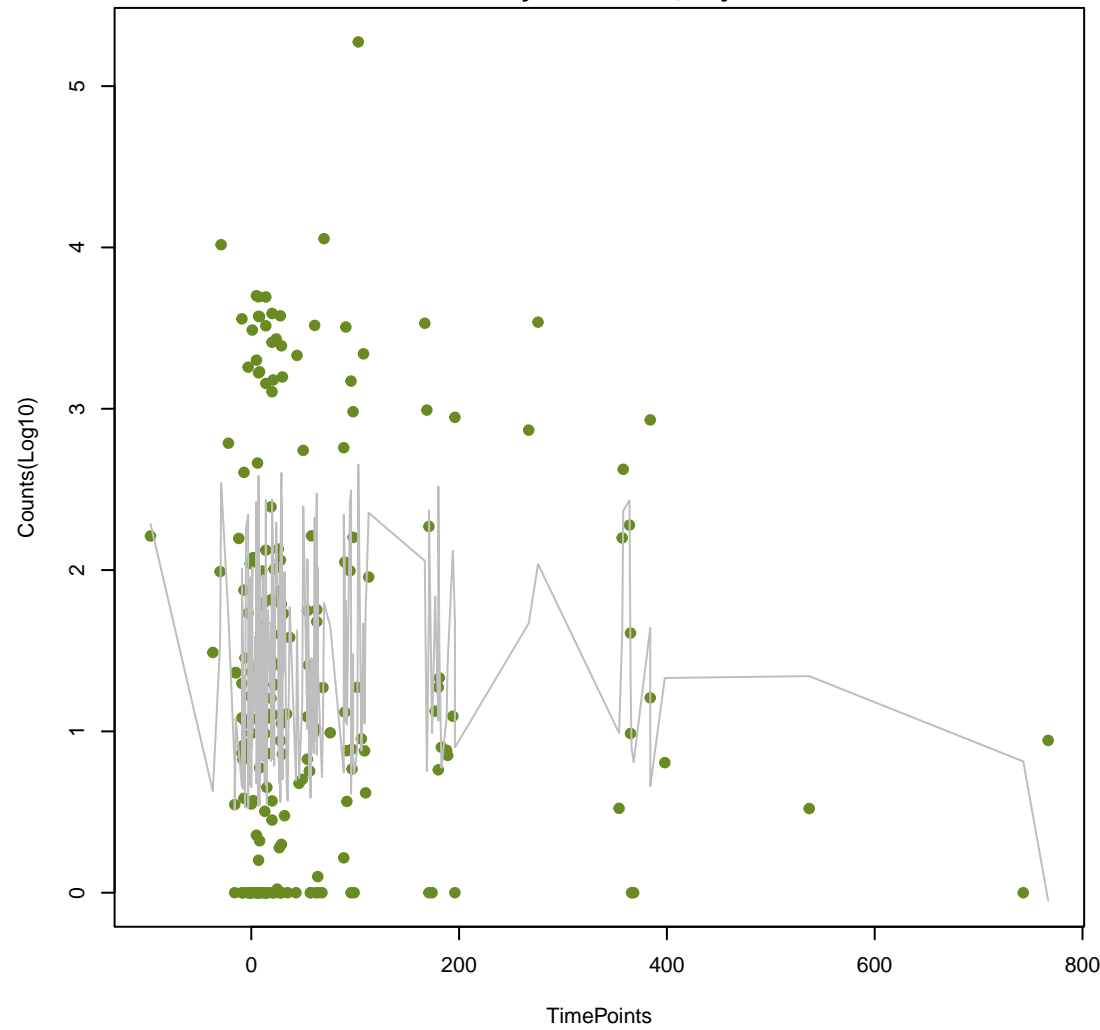
**HERA beta-lactamase**  
ANOVA P=0.429, adj. ANOVA-P=0.72  
Line vs. Poly F-P=1, adj. F-P=1



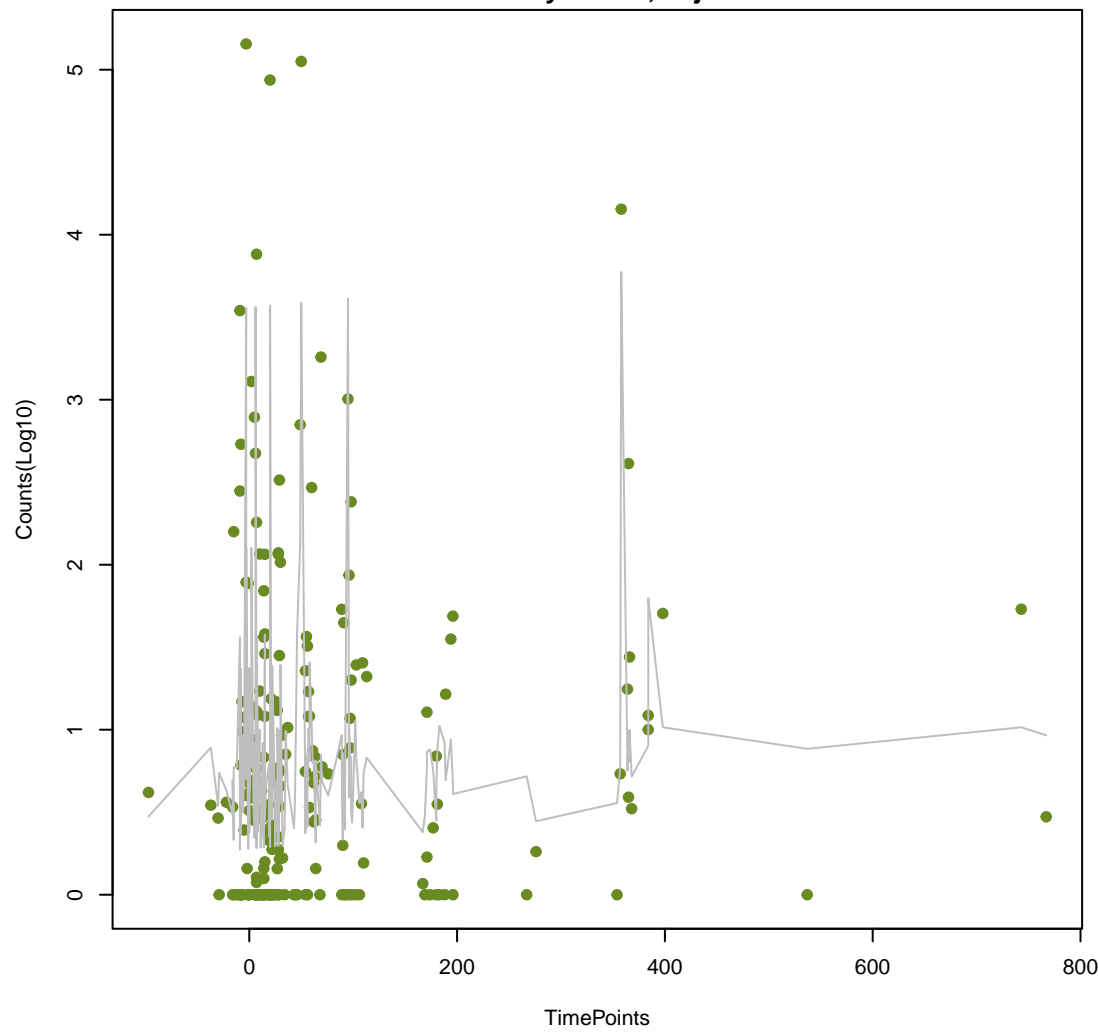
**CblA beta-lactamase**  
ANOVA P=0.45, adj. ANOVA-P=0.72  
Line vs. Poly F-P=0.673, adj. F-P=1



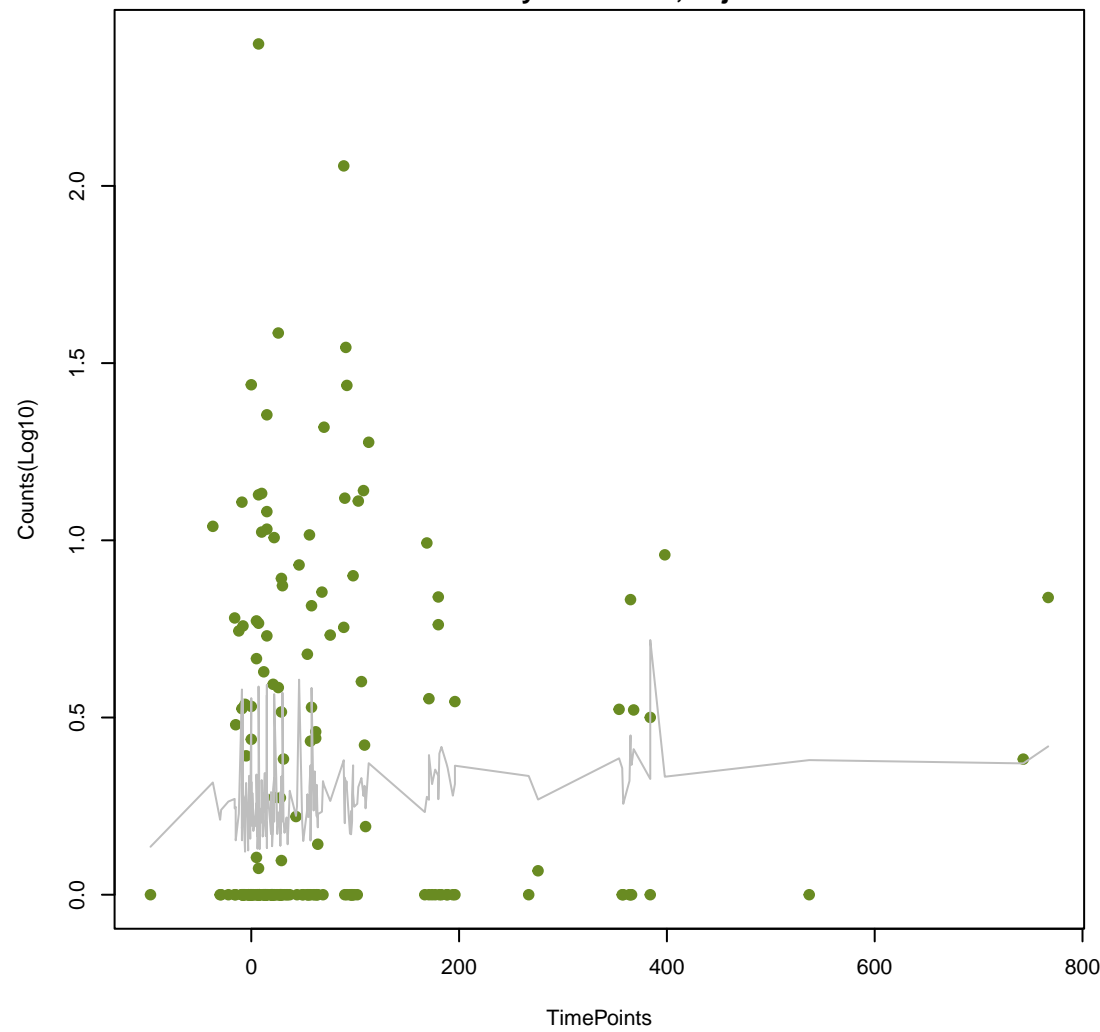
**glycopeptide resistance gene cluster;vanH**  
ANOVA P=0.451, adj. ANOVA-P=0.72  
Line vs. Poly F-P=0.324, adj. F-P=1



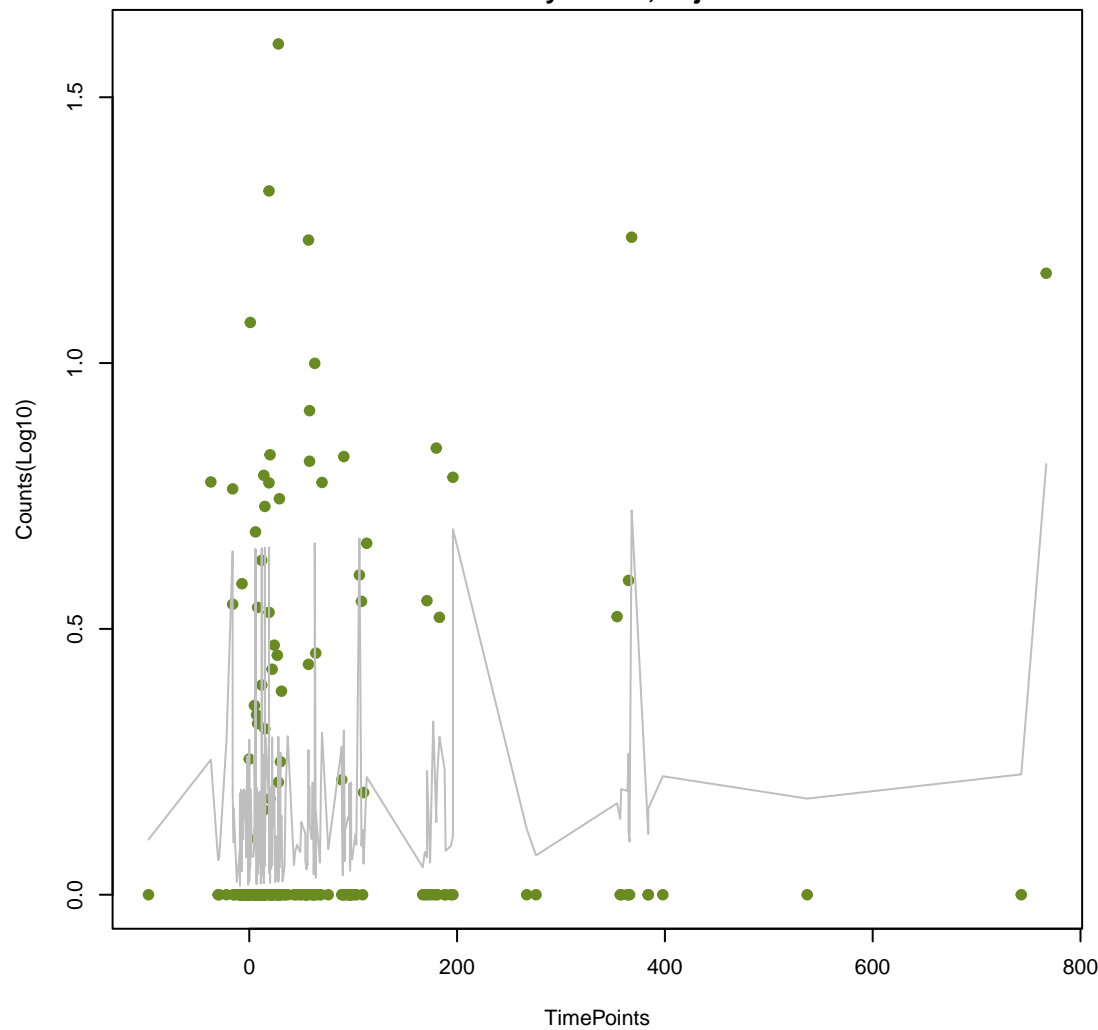
**OXA beta-lactamase**  
ANOVA P=0.451, adj. ANOVA-P=0.72  
Line vs. Poly F-P=1, adj. F-P=1



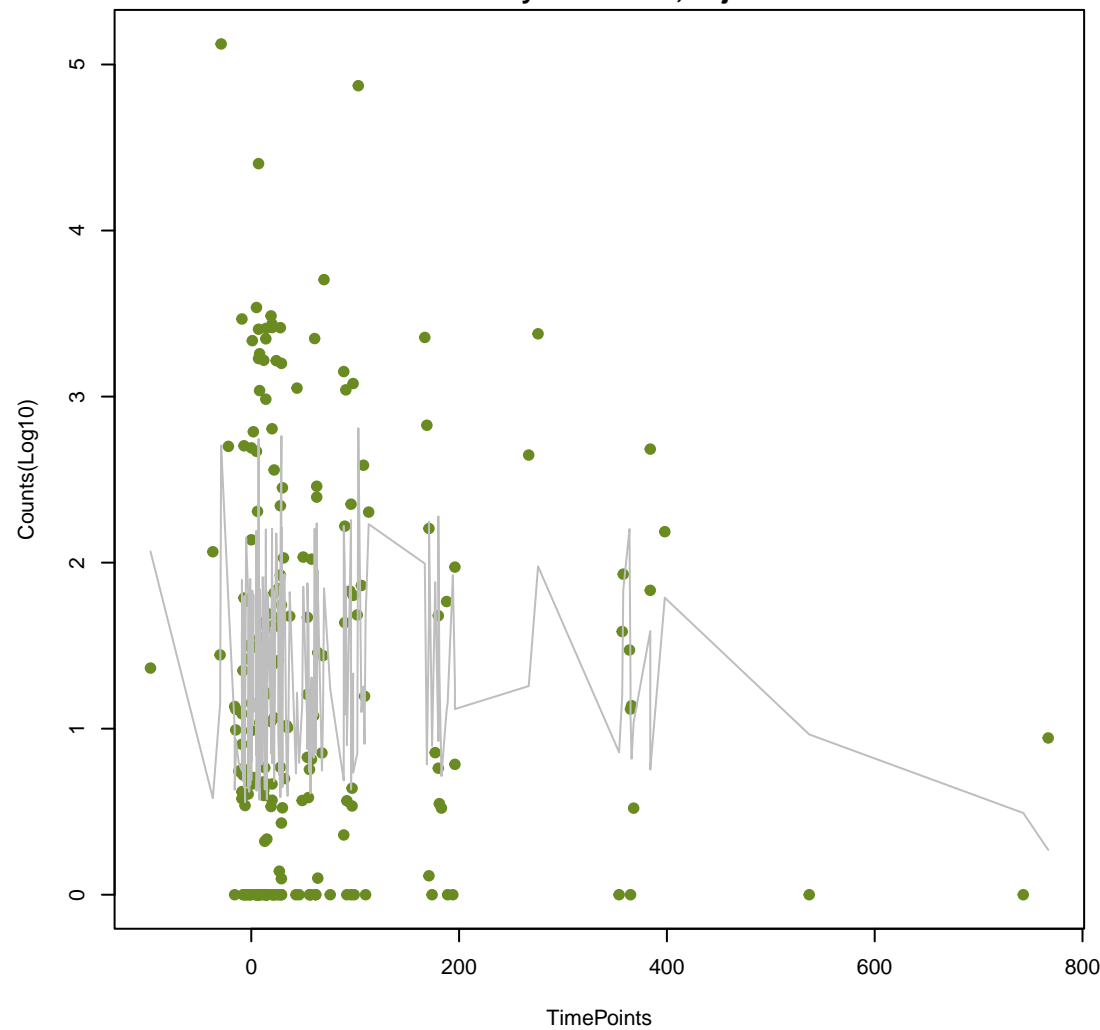
**rifampin phosphotransferase**  
ANOVA P=0.46, adj. ANOVA-P=0.721  
Line vs. Poly F-P=0.694, adj. F-P=1



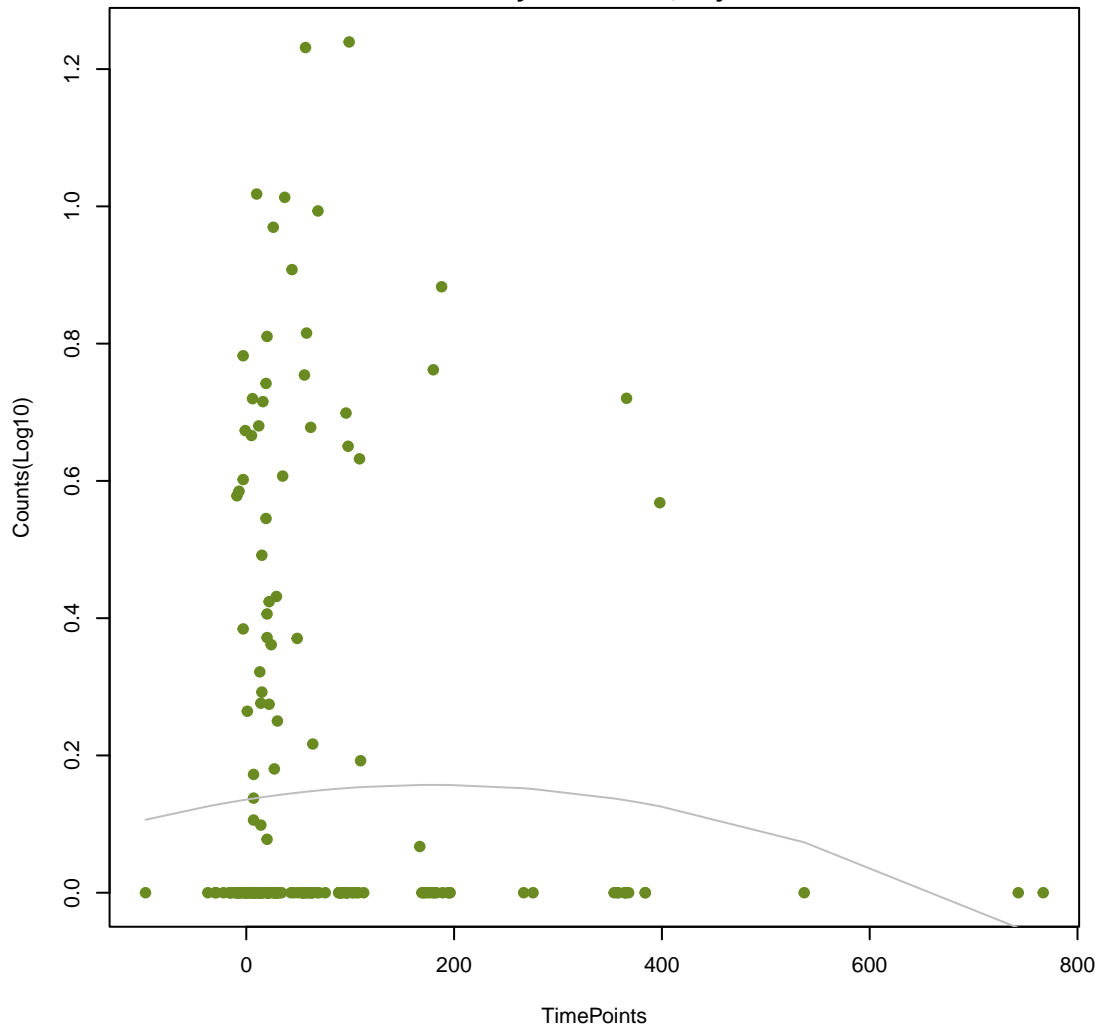
**CARB beta-lactamase**  
ANOVA P=0.469, adj. ANOVA-P=0.723  
Line vs. Poly F-P=1, adj. F-P=1



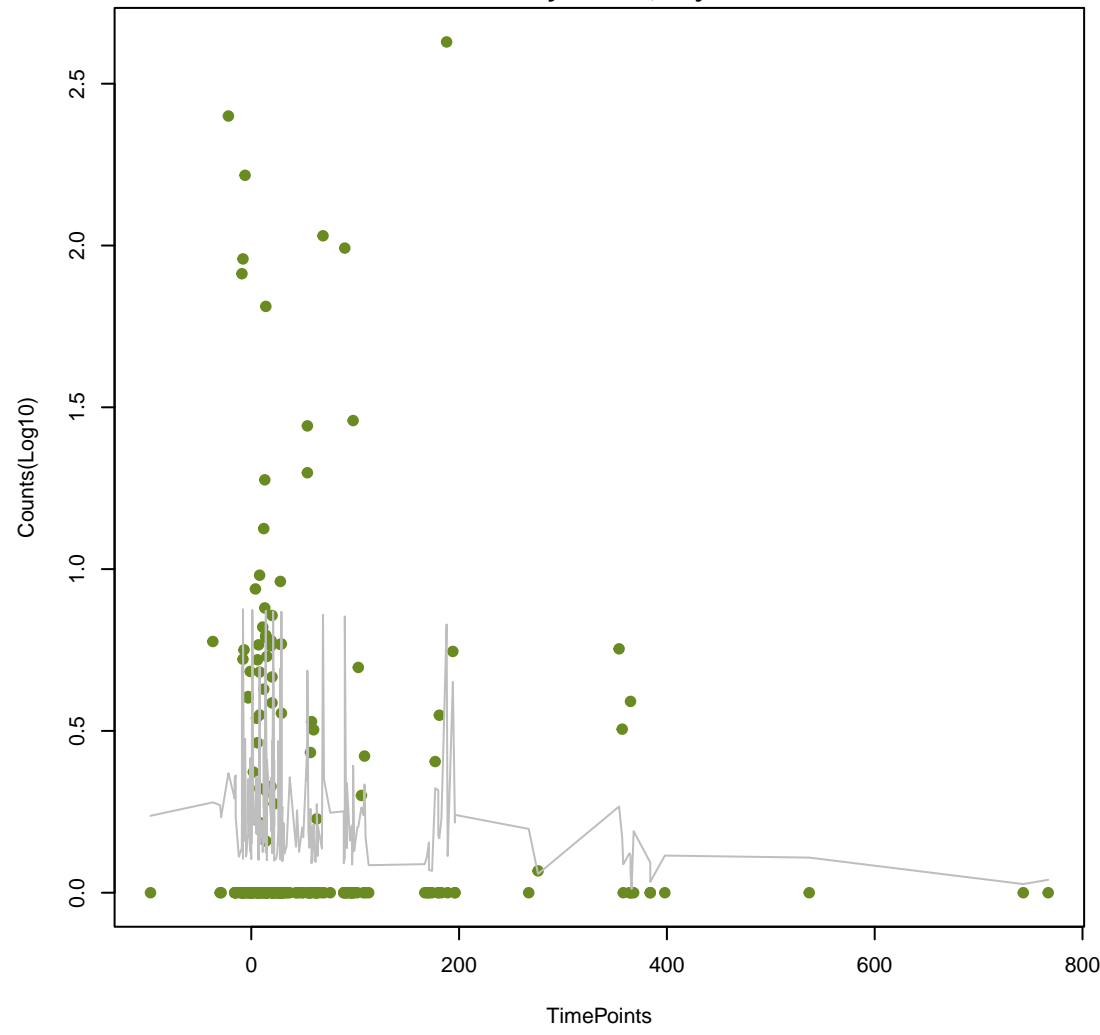
**glycopeptide resistance gene cluster;vanX**  
ANOVA P=0.531, adj. ANOVA-P=0.805  
Line vs. Poly F-P=0.371, adj. F-P=1



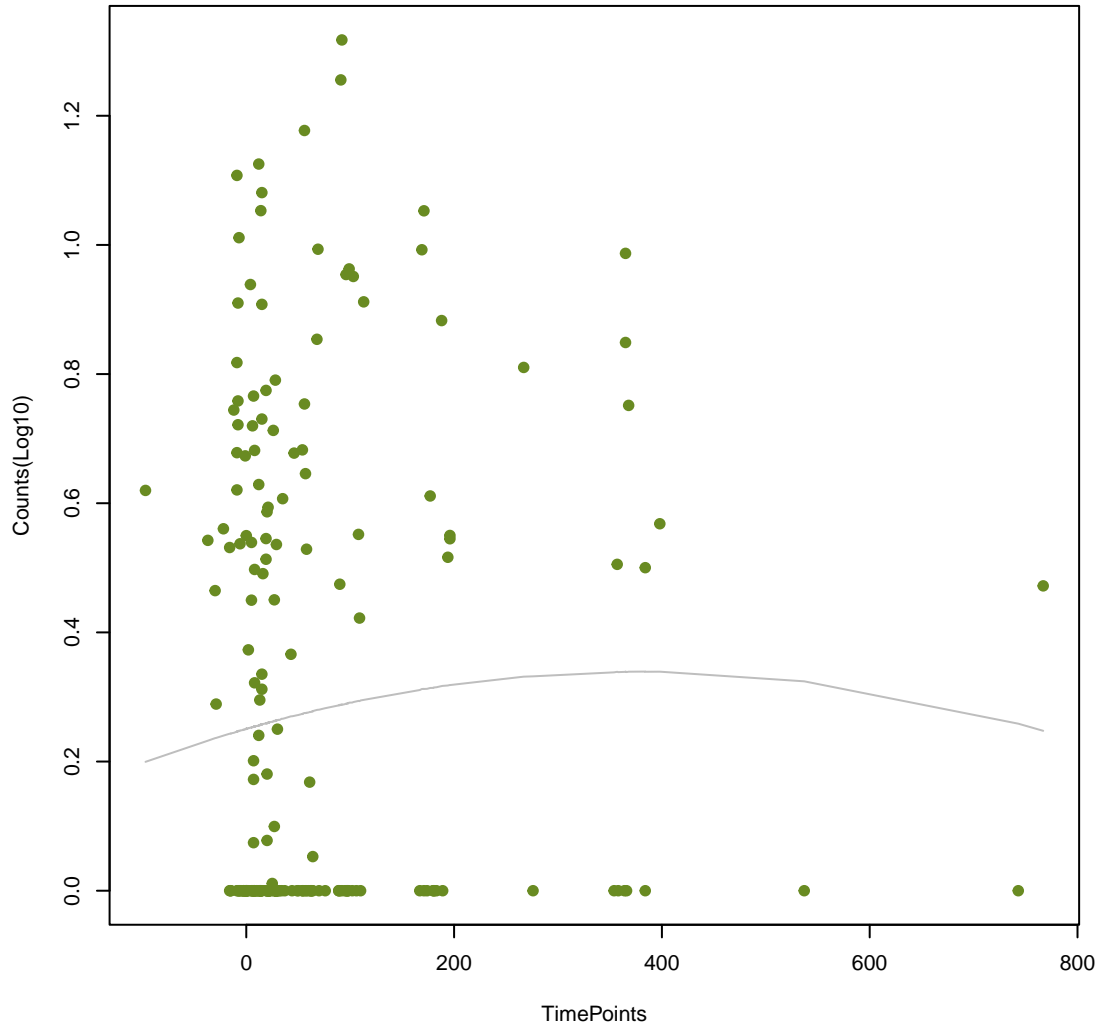
**MCR phosphoethanolamine transferase**  
ANOVA P=0.545, adj. ANOVA-P=0.813  
Line vs. Poly F-P=0.334, adj. F-P=1



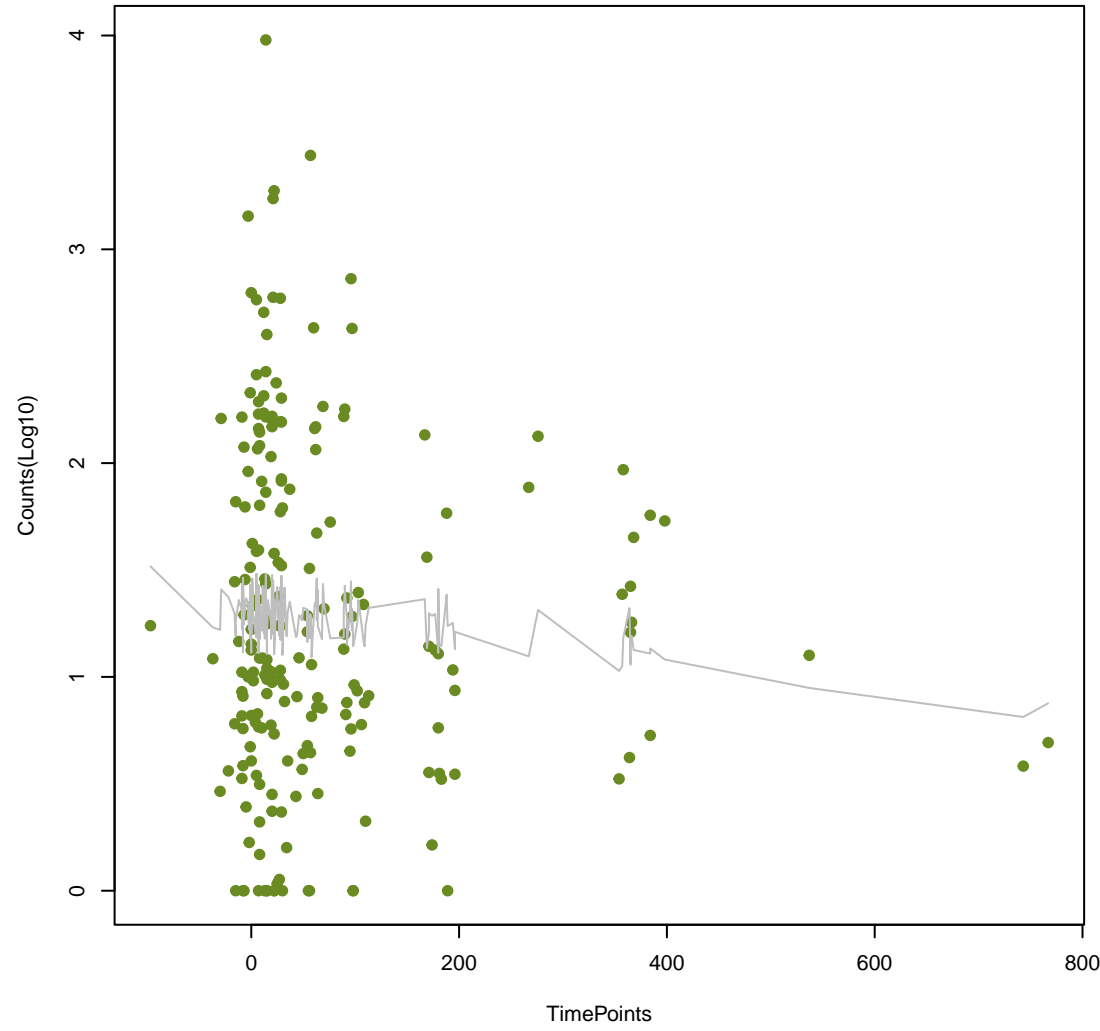
**CepA beta-lactamase**  
ANOVA P=0.58, adj. ANOVA-P=0.819  
Line vs. Poly F-P=1, adj. F-P=1



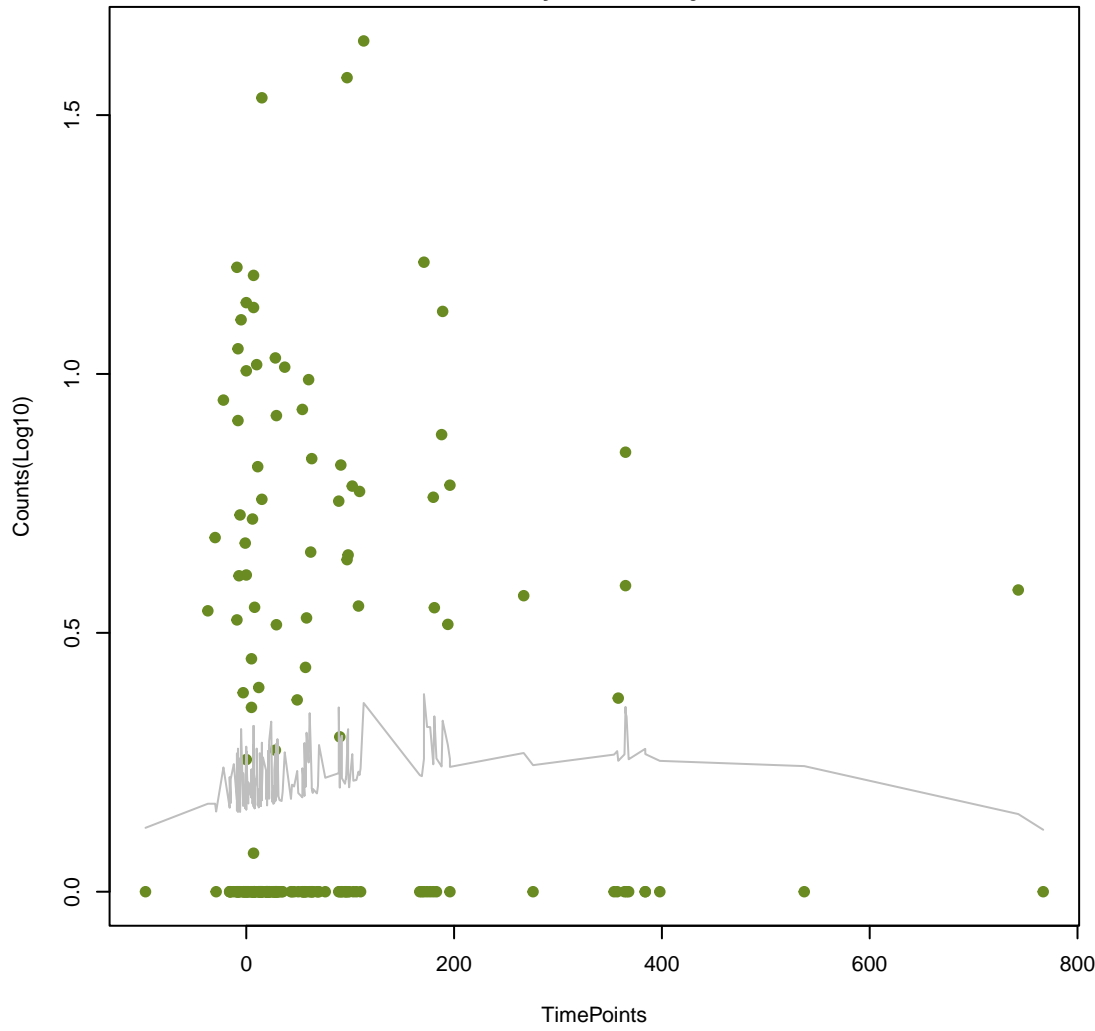
**LHK beta-lactamase**  
ANOVA P=0.583, adj. ANOVA-P=0.819  
Line vs. Poly F-P=0.439, adj. F-P=1



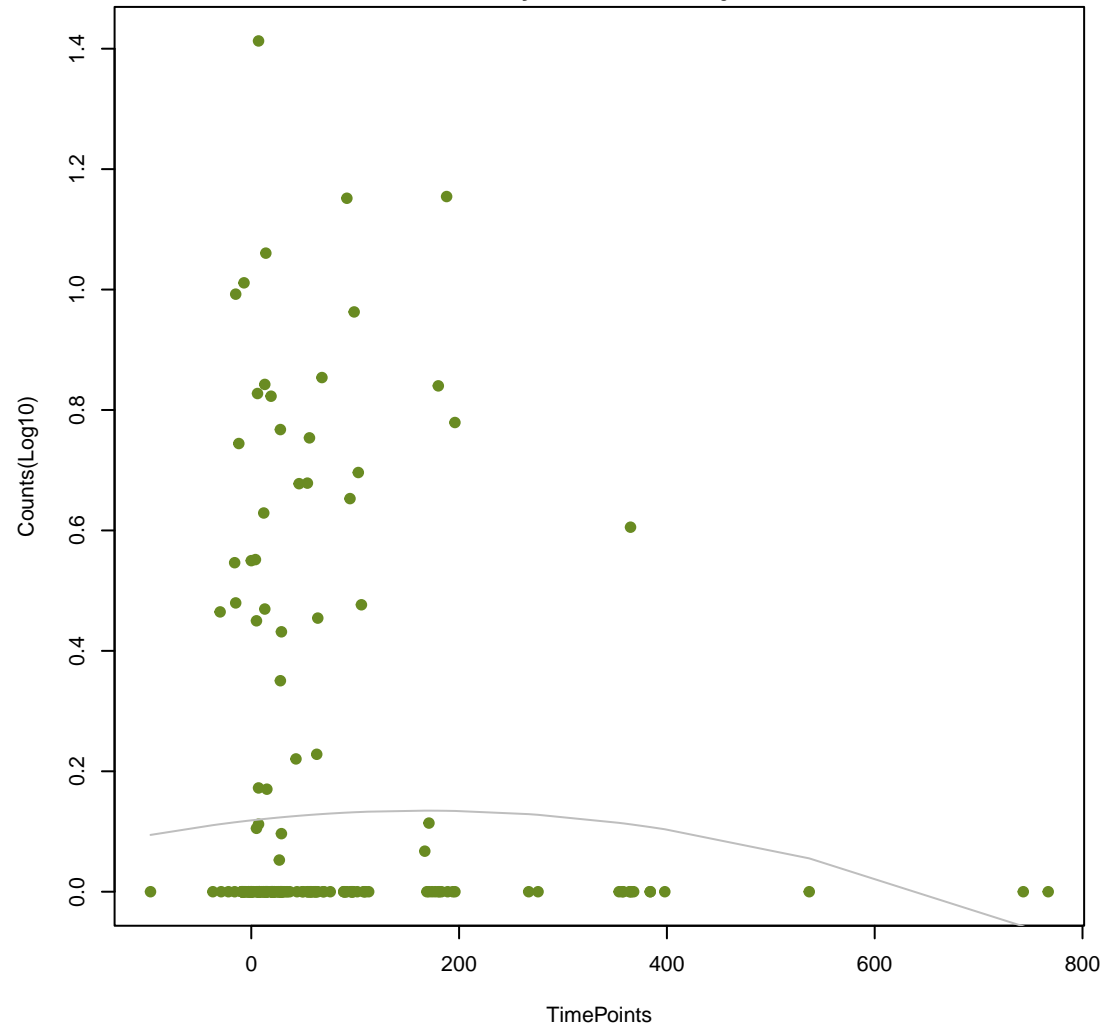
**Miscellaneous ABC-F subfamily ATP-binding cassette ribosomal protection protein**  
ANOVA P=0.586, adj. ANOVA-P=0.819  
Line vs. Poly F-P=1, adj. F-P=1



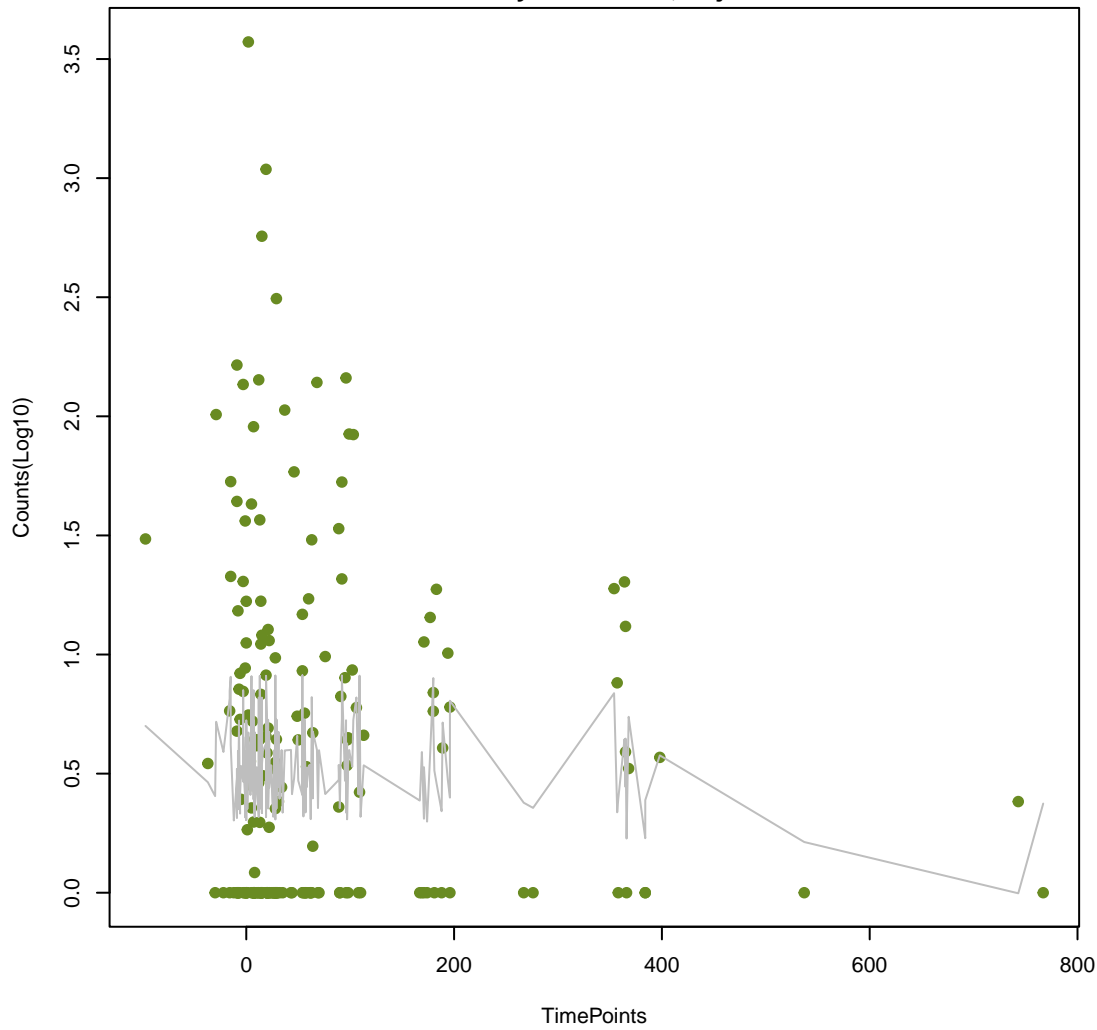
**DHA beta-lactamase**  
ANOVA P=0.594, adj. ANOVA-P=0.819  
Line vs. Poly F-P=1, adj. F-P=1



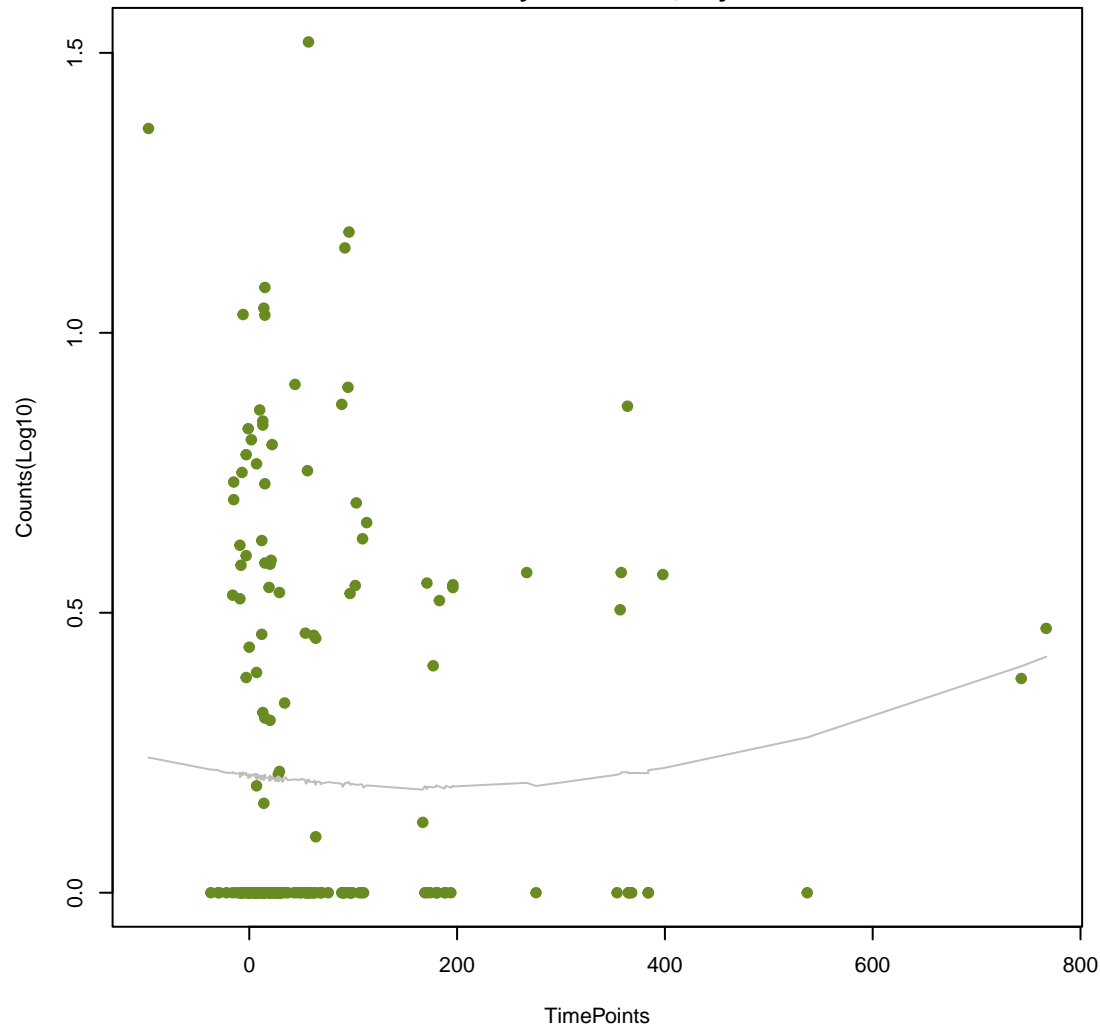
**RAHN beta-lactamase**  
ANOVA P=0.594, adj. ANOVA-P=0.819  
Line vs. Poly F-P=0.394, adj. F-P=1



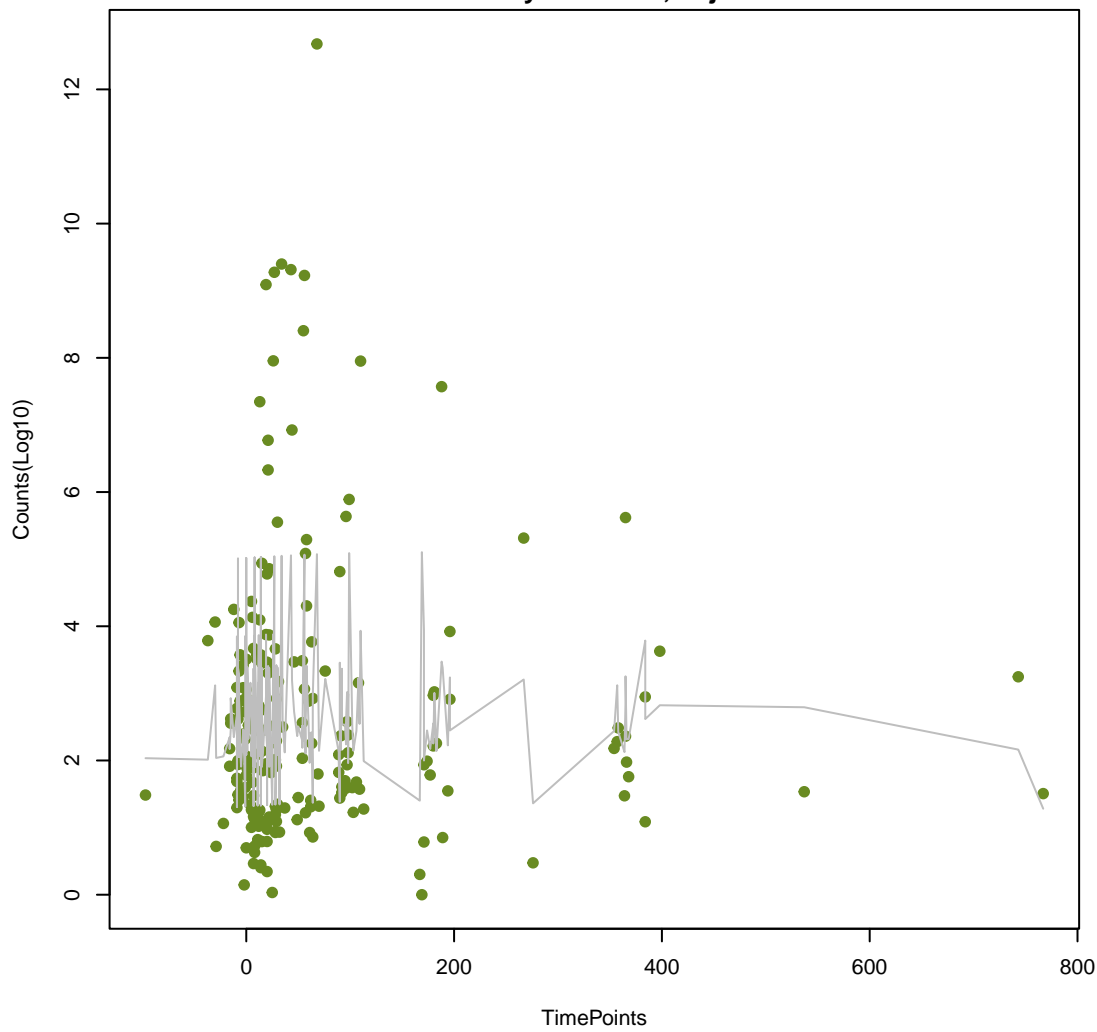
**CDD beta-lactamase**  
ANOVA P=0.605, adj. ANOVA-P=0.822  
Line vs. Poly F-P=0.429, adj. F-P=1



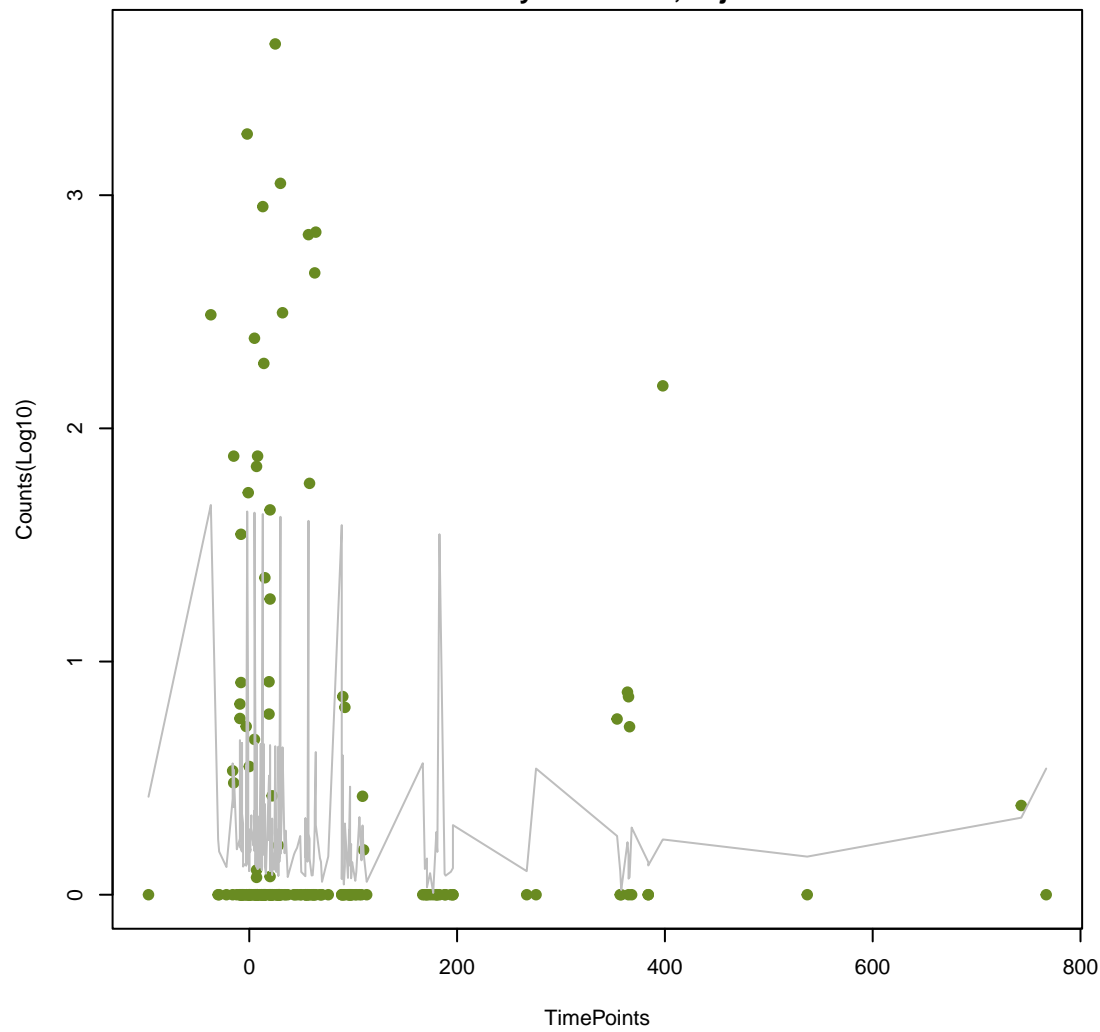
**SGM beta-lactamase**  
ANOVA P=0.638, adj. ANOVA-P=0.853  
Line vs. Poly F-P=0.962, adj. F-P=1



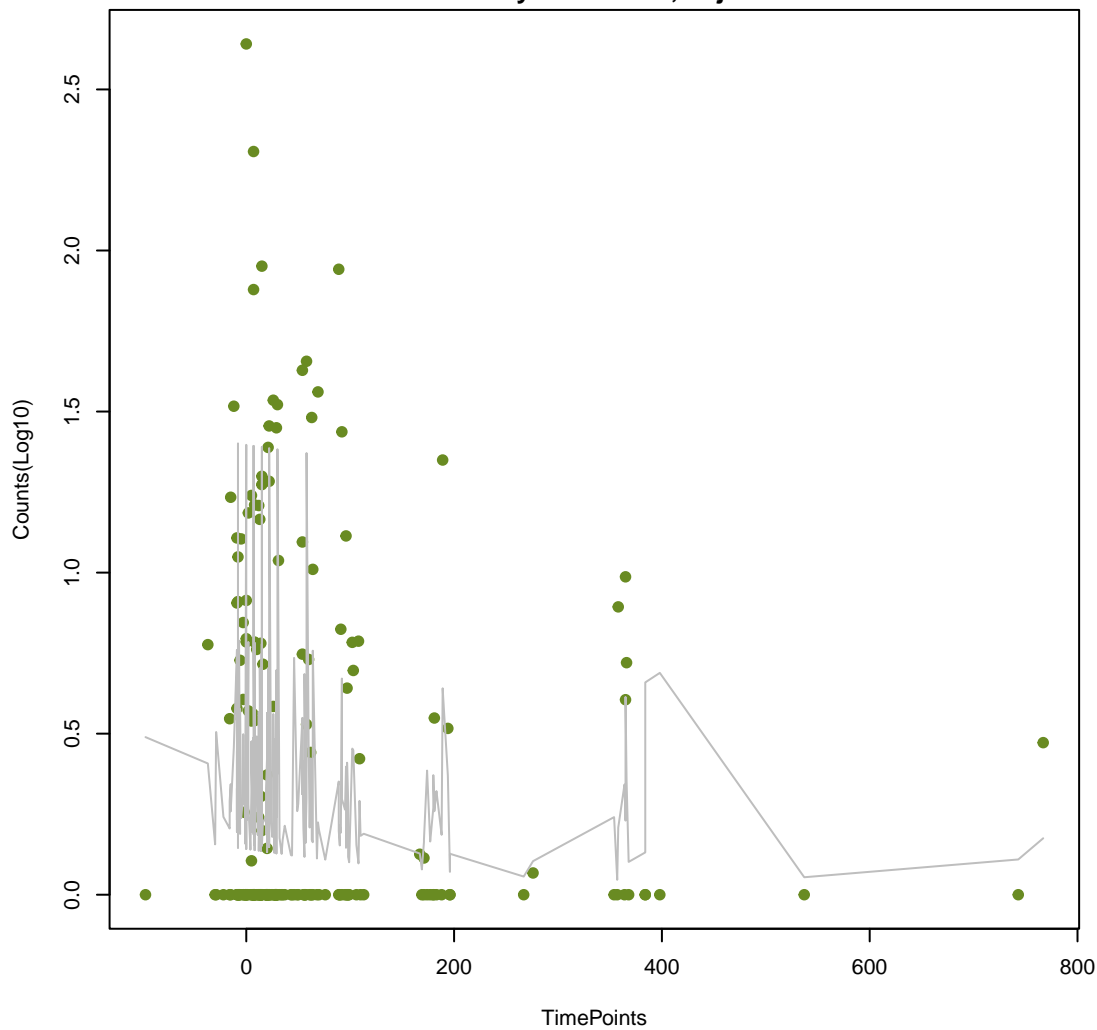
**methicillin resistant PBP2**  
ANOVA P=0.667, adj. ANOVA-P=0.88  
Line vs. Poly F-P=0.52, adj. F-P=1



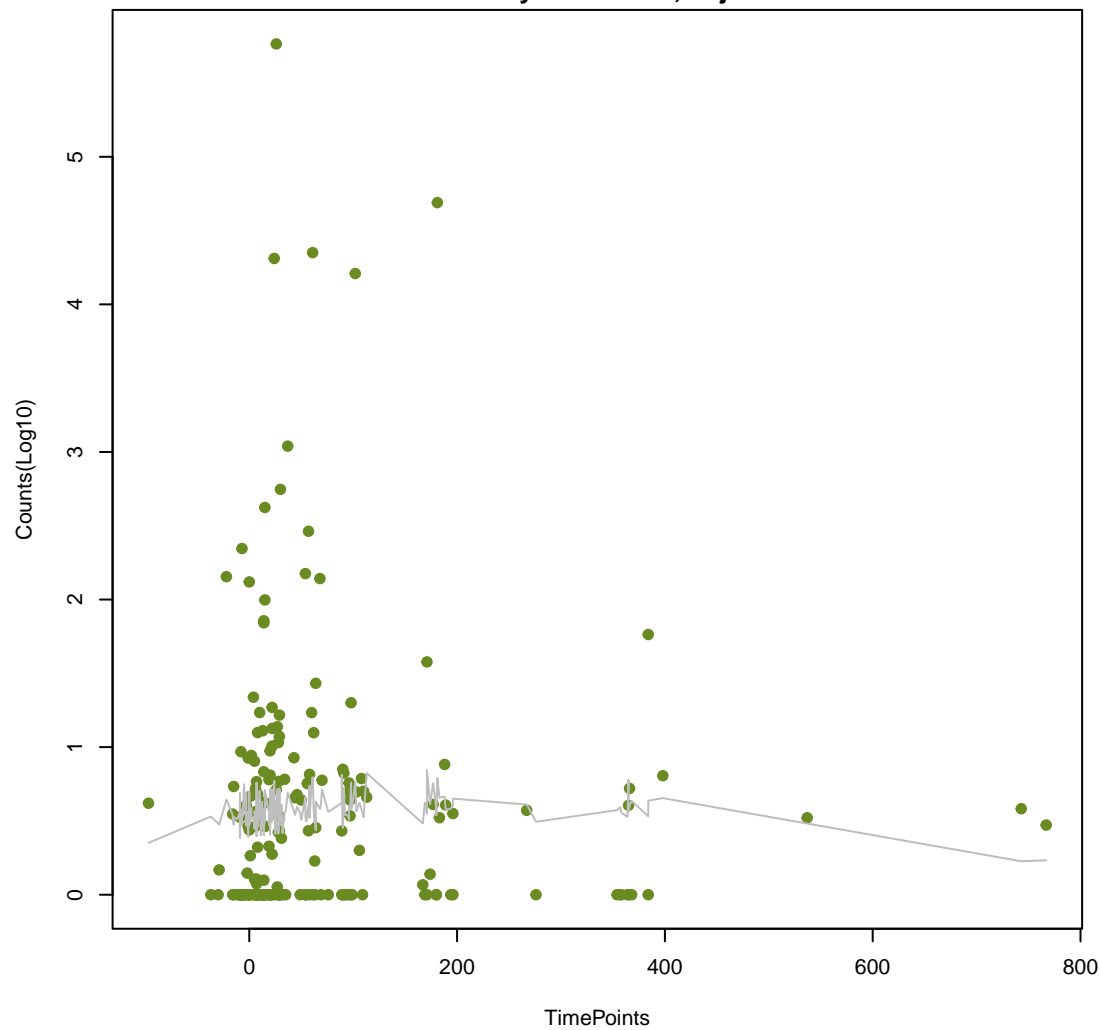
**ANT(3")**  
ANOVA P=0.679, adj. ANOVA-P=0.883  
Line vs. Poly F-P=0.507, adj. F-P=1



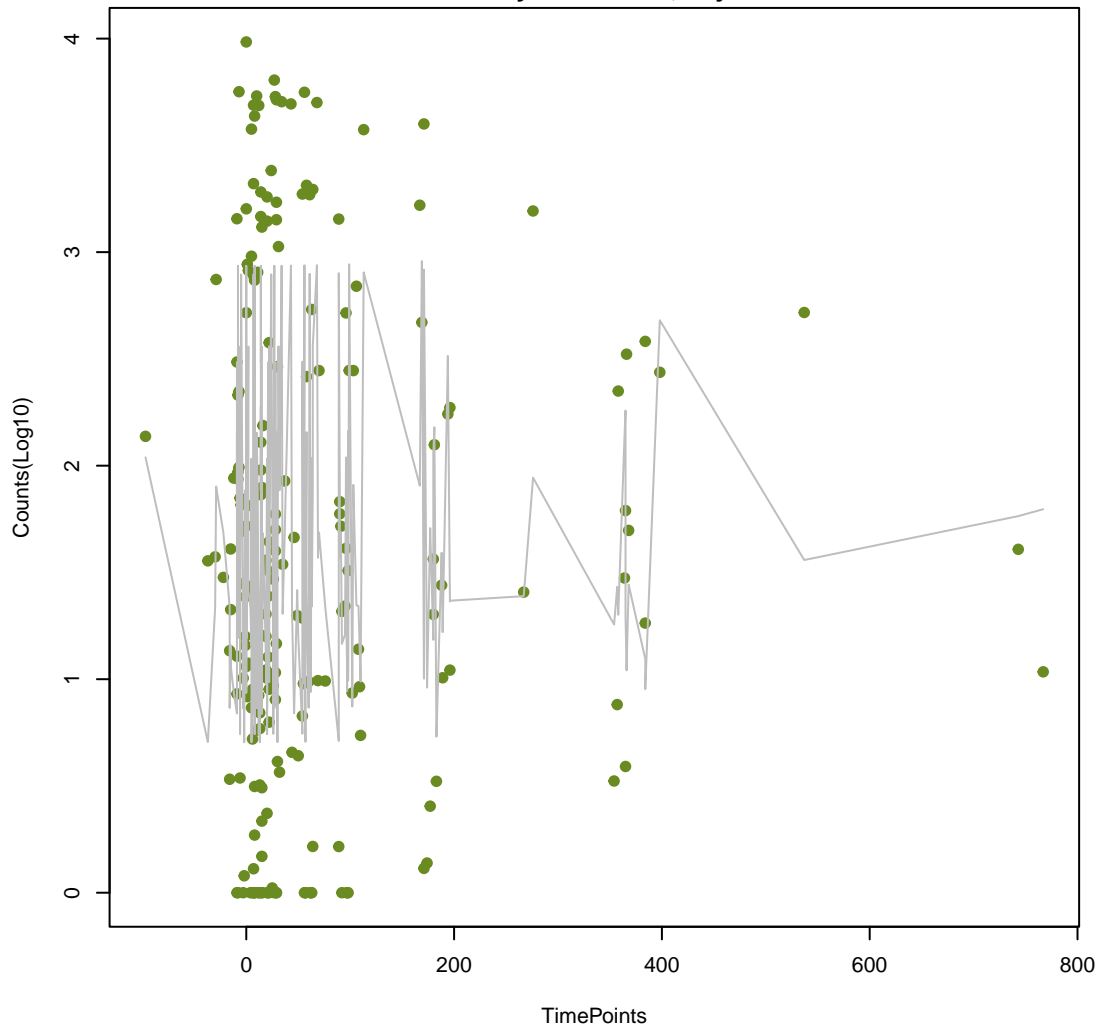
**ole glycosyltransferase**  
ANOVA P=0.706, adj. ANOVA-P=0.904  
Line vs. Poly F-P=0.672, adj. F-P=1



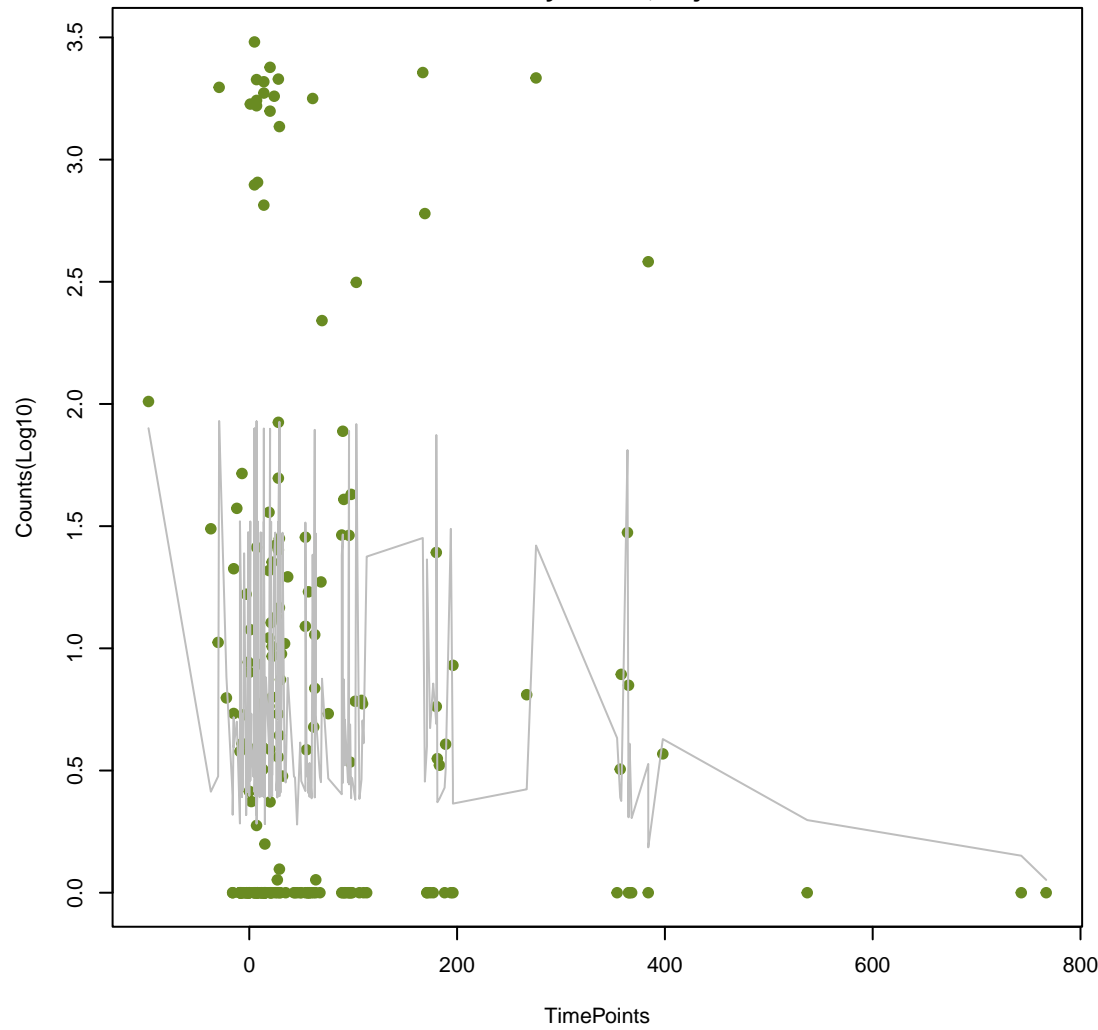
**SHV beta-lactamase**  
ANOVA P=0.749, adj. ANOVA-P=0.934  
Line vs. Poly F-P=0.572, adj. F-P=1



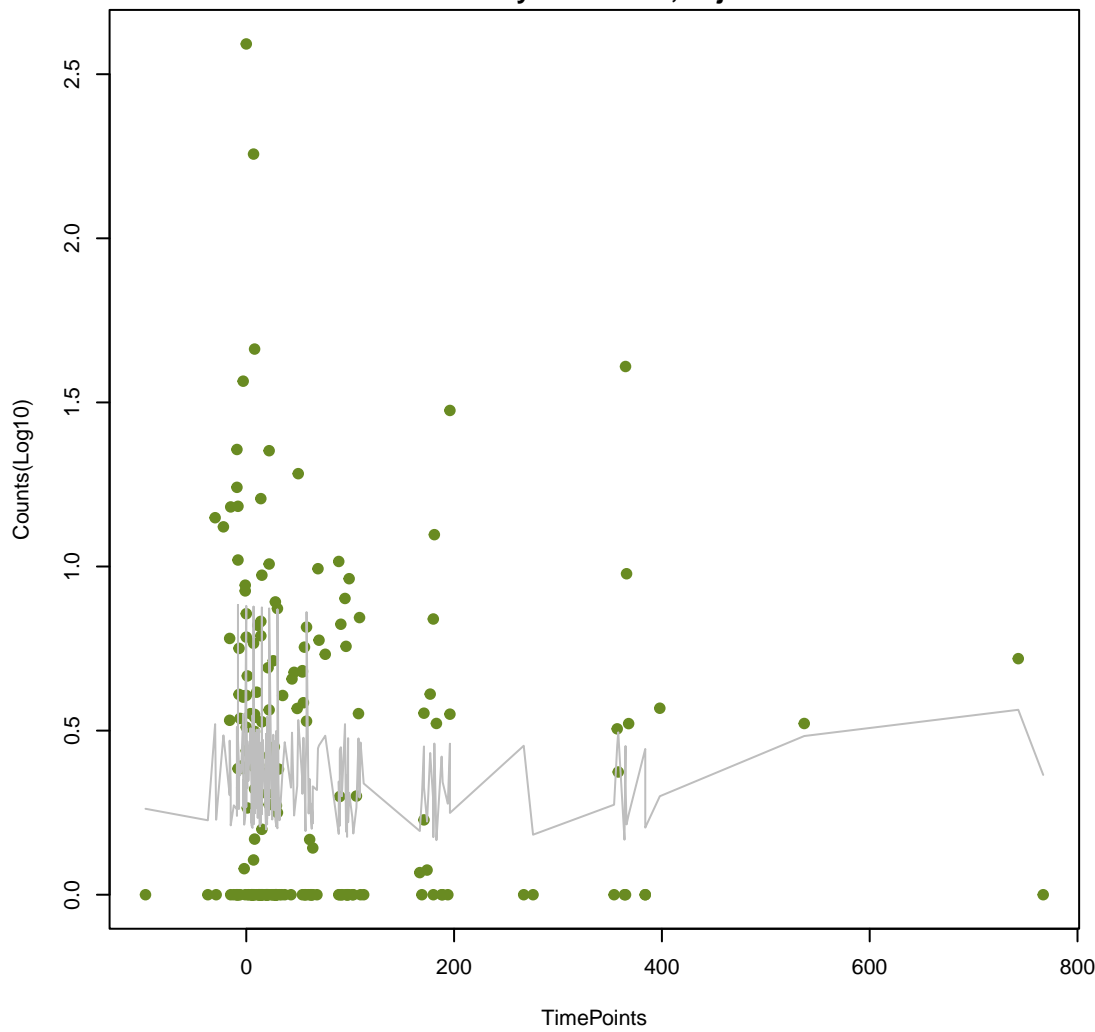
**AAC(6');APH(2")**  
ANOVA P=0.75, adj. ANOVA-P=0.934  
Line vs. Poly F-P=0.684, adj. F-P=1



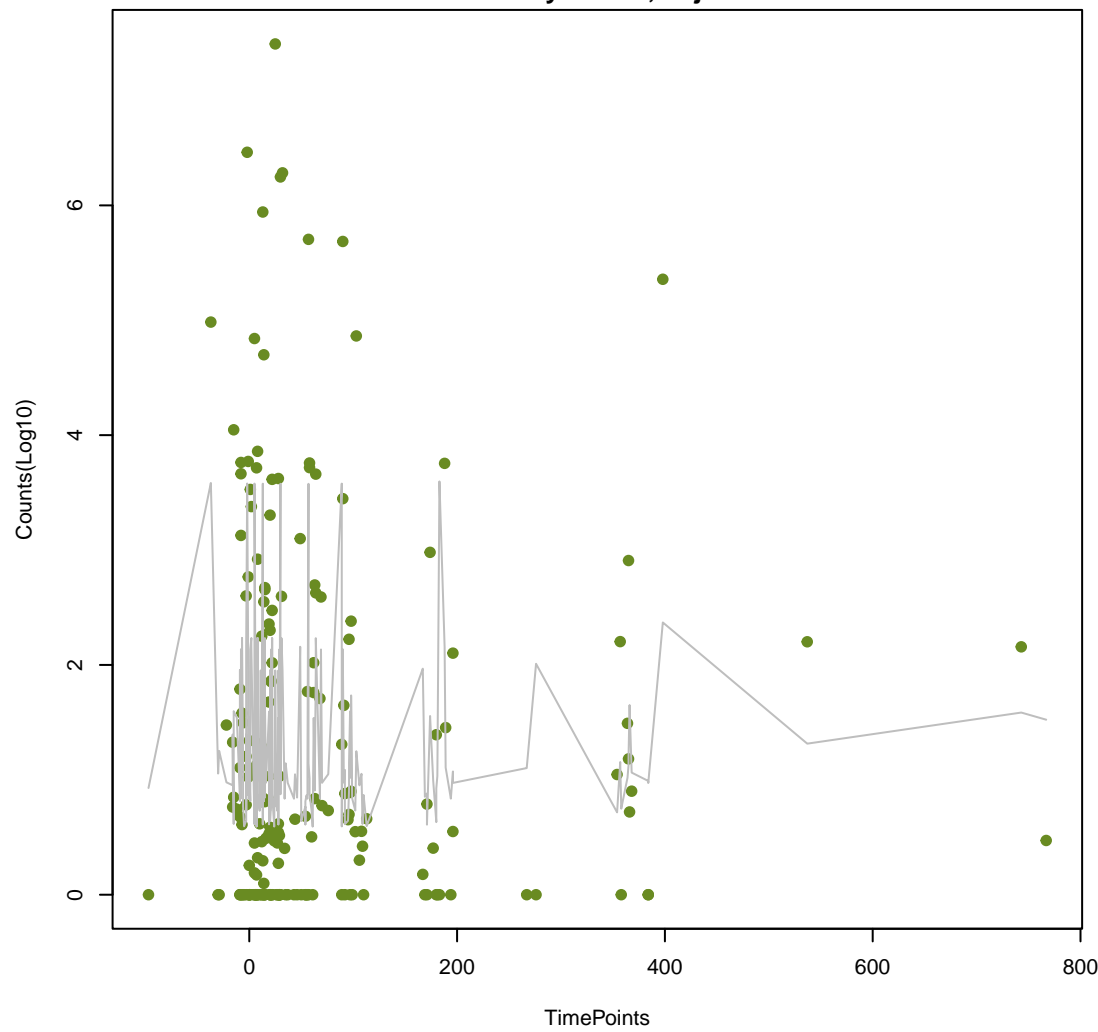
**glycopeptide resistance gene cluster;vanZ**  
ANOVA P=0.813, adj. ANOVA-P=0.955  
Line vs. Poly F-P=1, adj. F-P=1



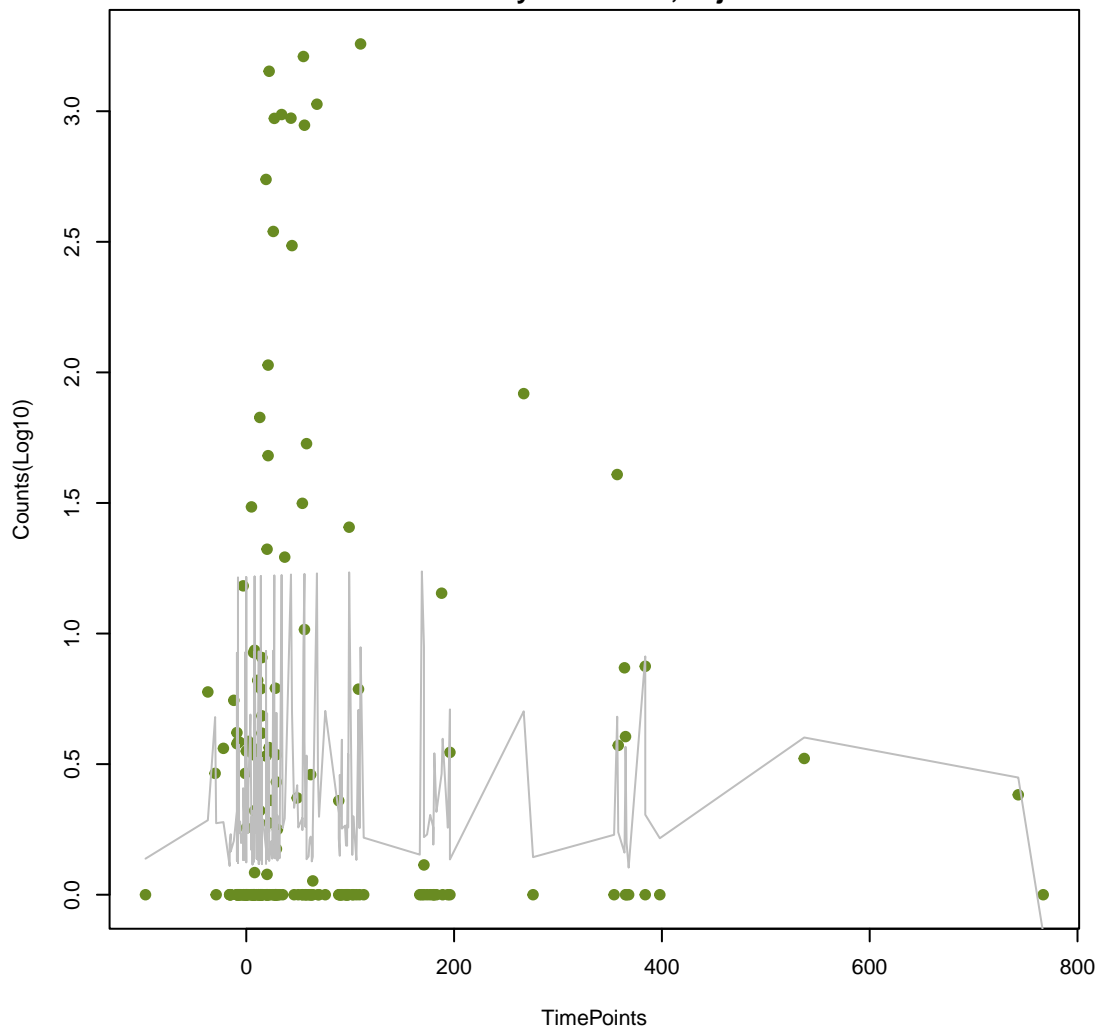
**OCH beta-lactamase**  
ANOVA P=0.821, adj. ANOVA-P=0.955  
Line vs. Poly F-P=0.653, adj. F-P=1



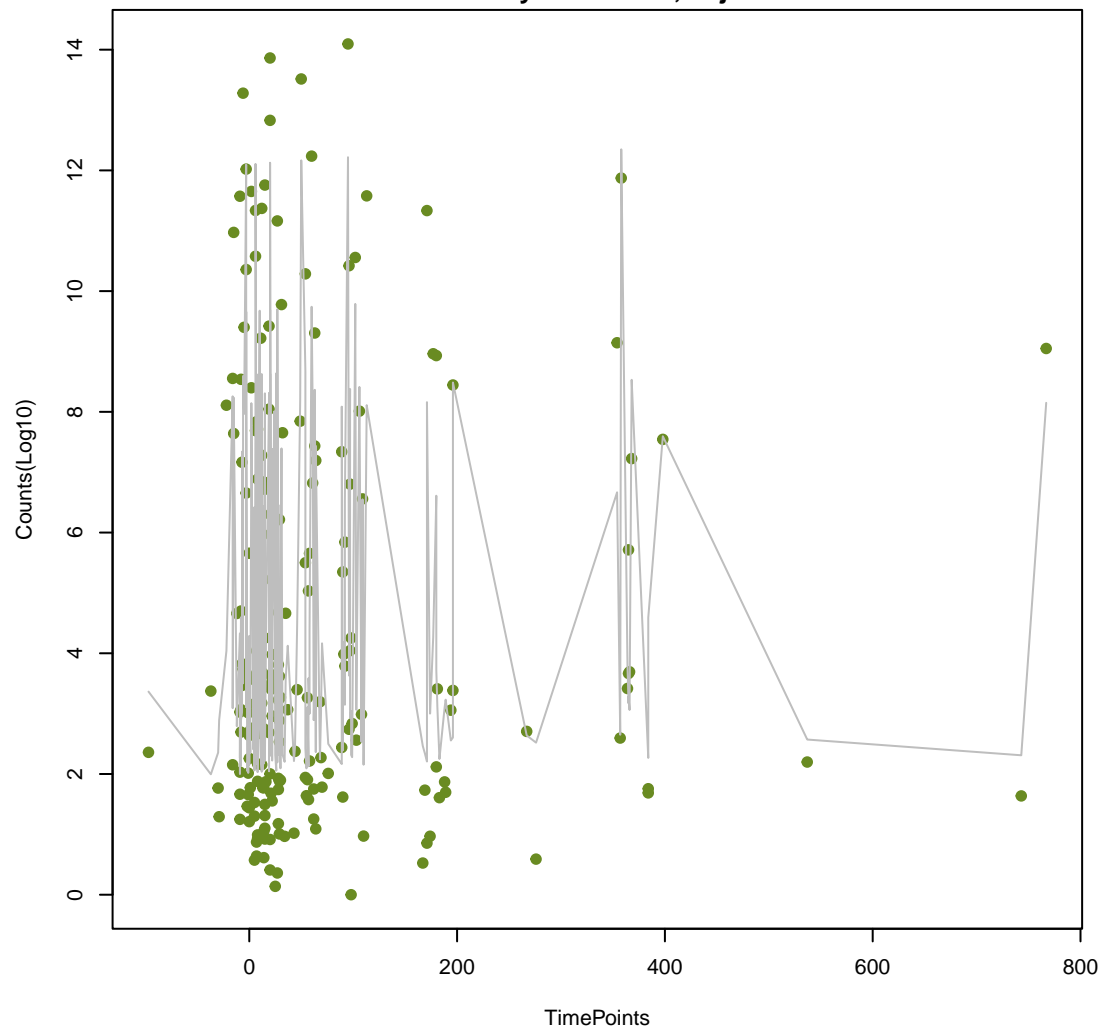
**sulfonamide resistant sul**  
ANOVA P=0.828, adj. ANOVA-P=0.955  
Line vs. Poly F-P=1, adj. F-P=1



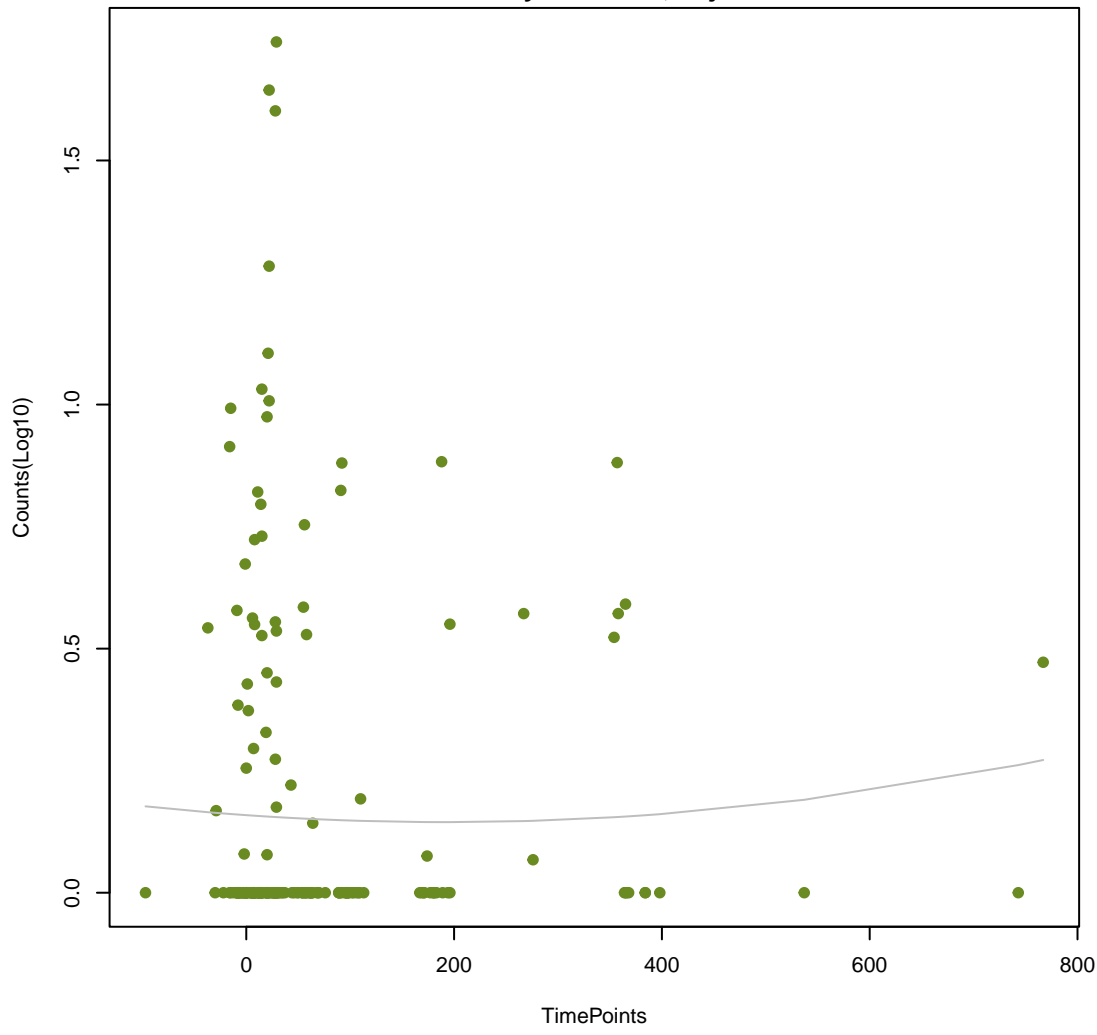
**BlaZ beta-lactamase**  
ANOVA P=0.847, adj. ANOVA-P=0.955  
Line vs. Poly F-P=0.894, adj. F-P=1



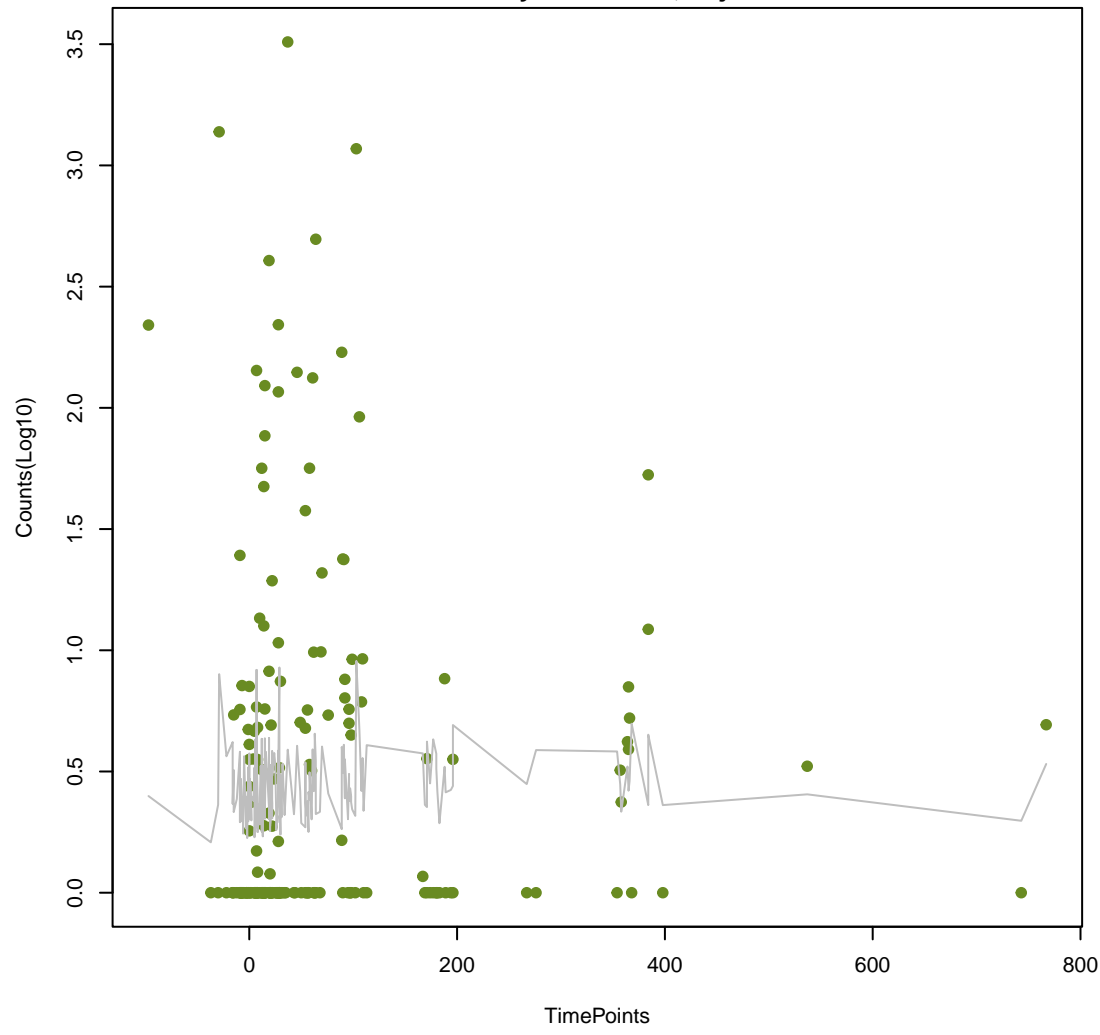
**tetracycline inactivation enzyme**  
ANOVA P=0.867, adj. ANOVA-P=0.955  
Line vs. Poly F-P=0.642, adj. F-P=1



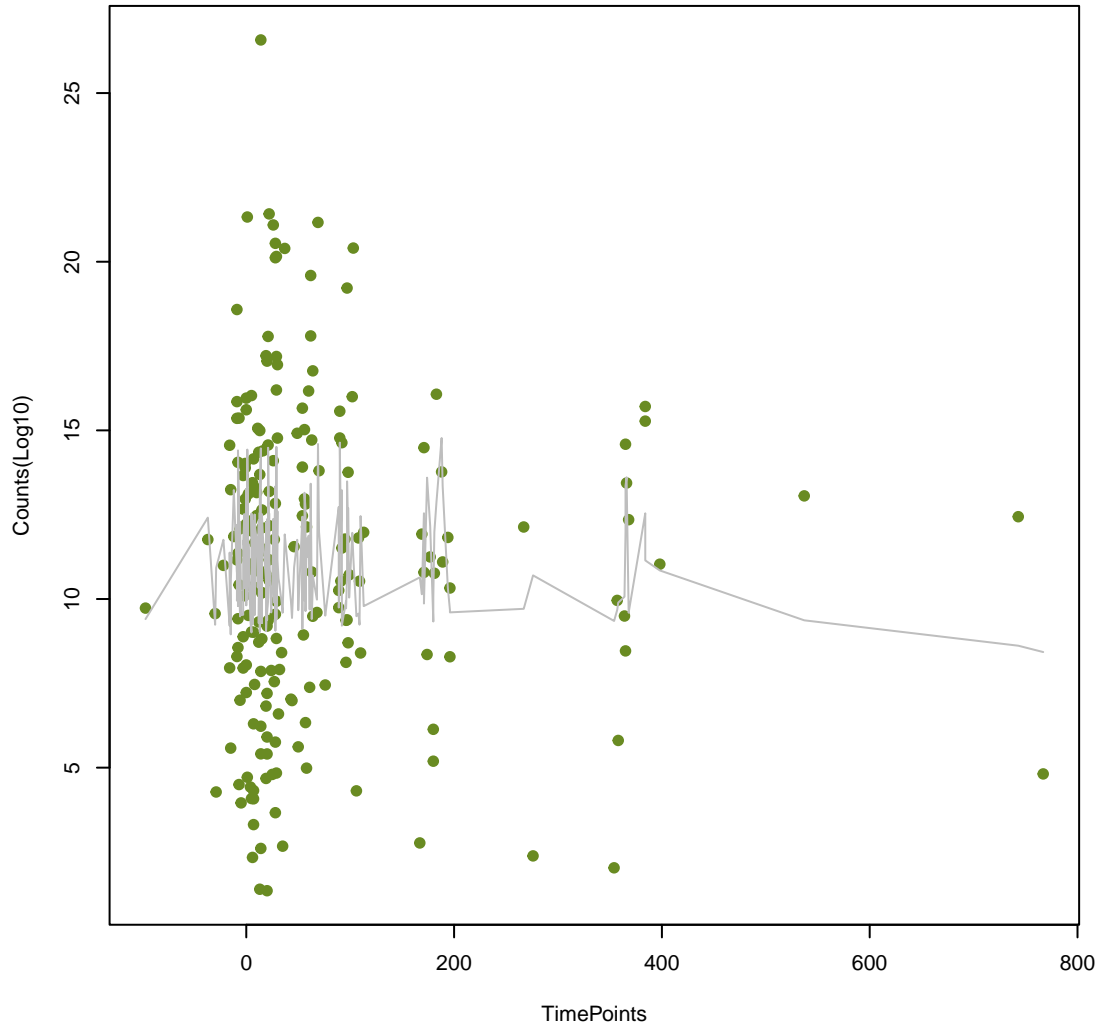
**vga-type ABC-F protein**  
ANOVA P=0.87, adj. ANOVA-P=0.955  
Line vs. Poly F-P=0.63, adj. F-P=1



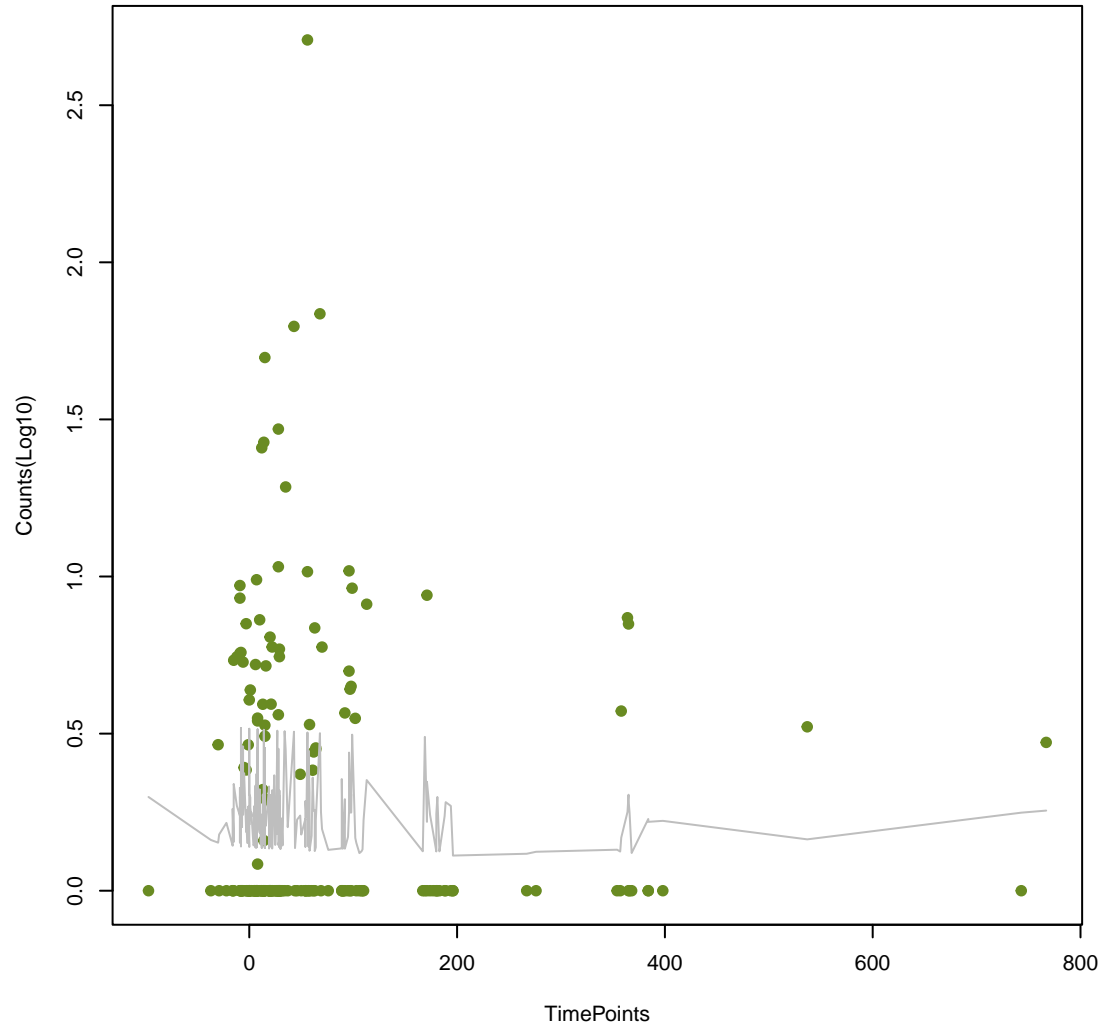
**glycopeptide resistance gene cluster;vanT**  
ANOVA P=0.872, adj. ANOVA-P=0.955  
Line vs. Poly F-P=0.617, adj. F-P=1



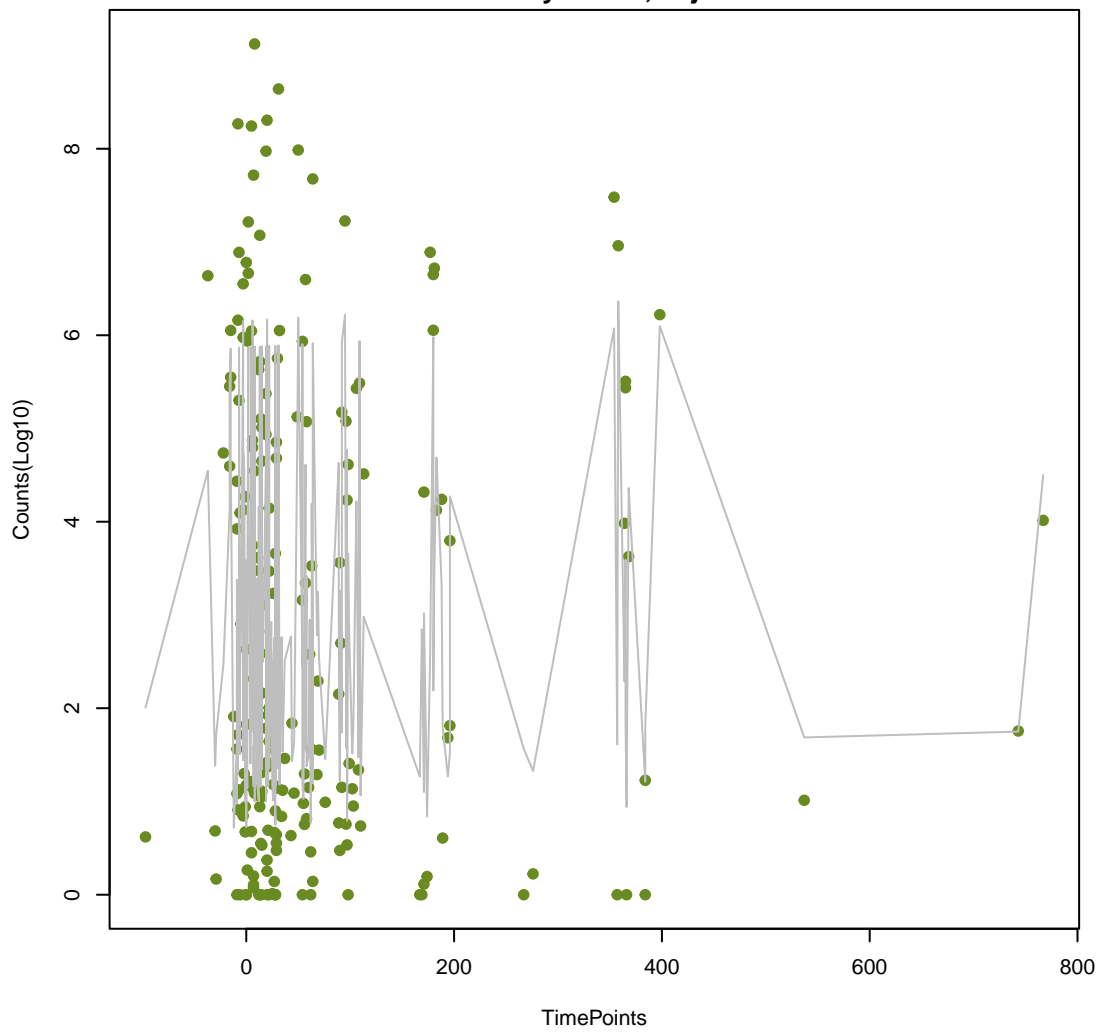
**ATP-binding cassette (ABC) antibiotic efflux pump**  
ANOVA P=0.876, adj. ANOVA-P=0.955  
Line vs. Poly F-P=1, adj. F-P=1



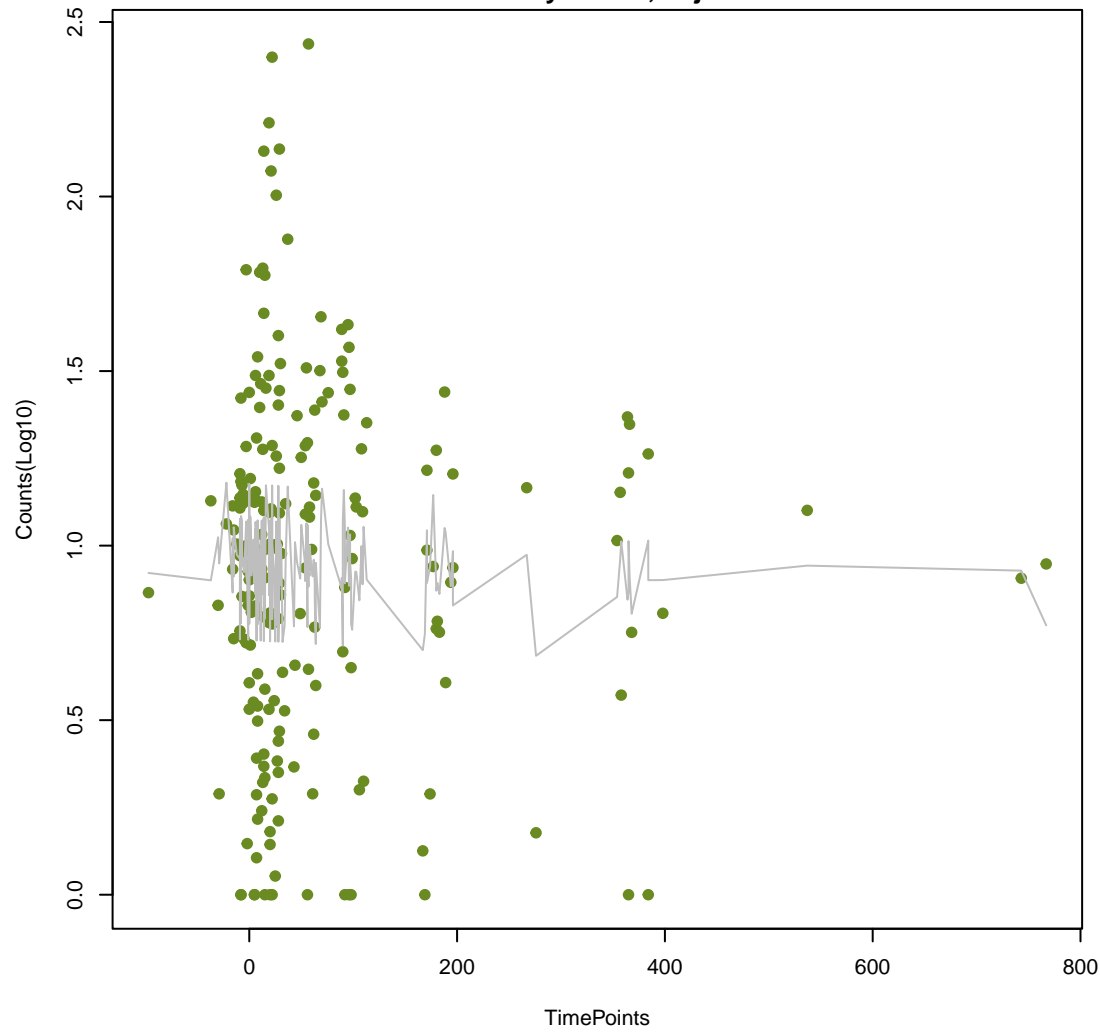
**Cfr 23S ribosomal RNA methyltransferase**  
ANOVA P=0.877, adj. ANOVA-P=0.955  
Line vs. Poly F-P=0.398, adj. F-P=1



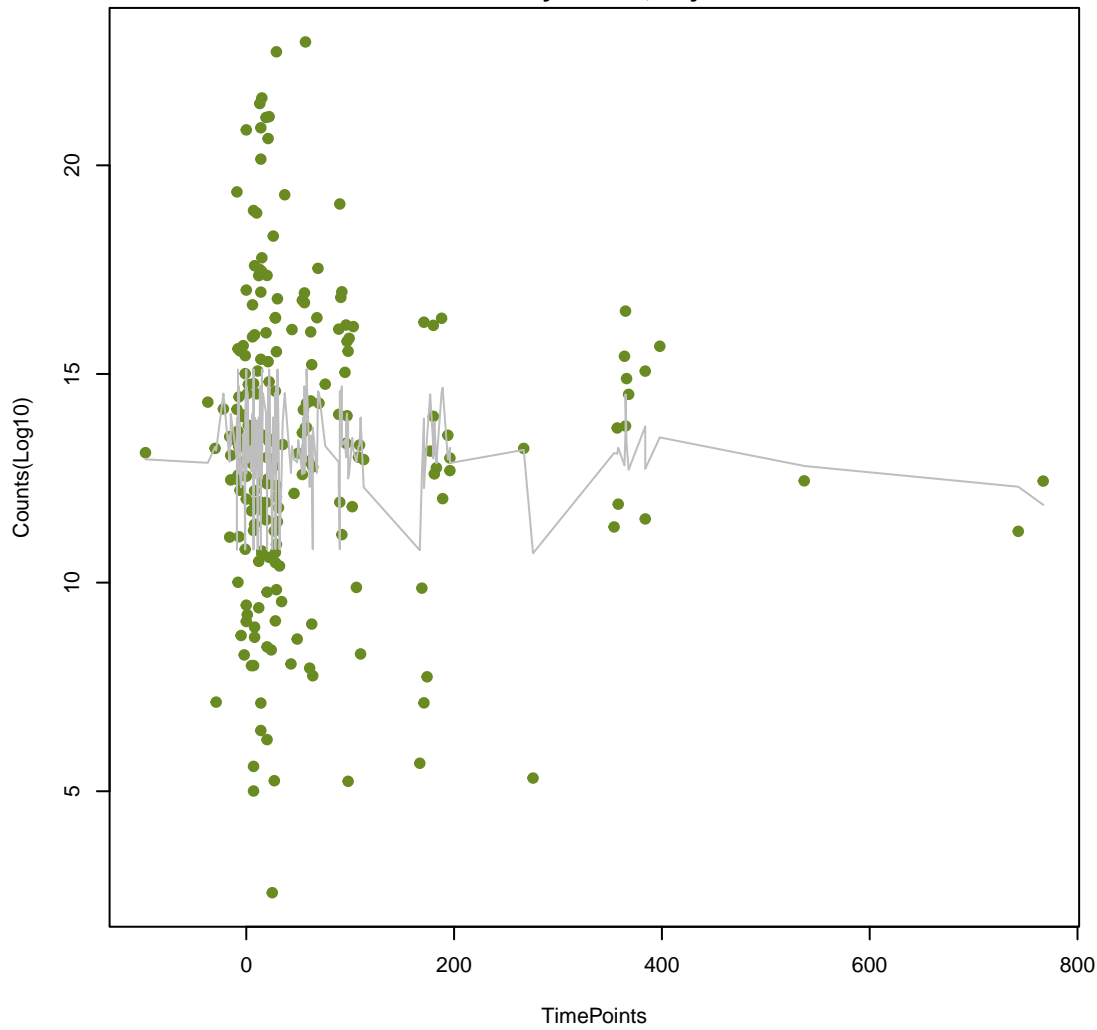
**CfxA beta-lactamase**  
ANOVA P=0.878, adj. ANOVA-P=0.955  
Line vs. Poly F-P=1, adj. F-P=1



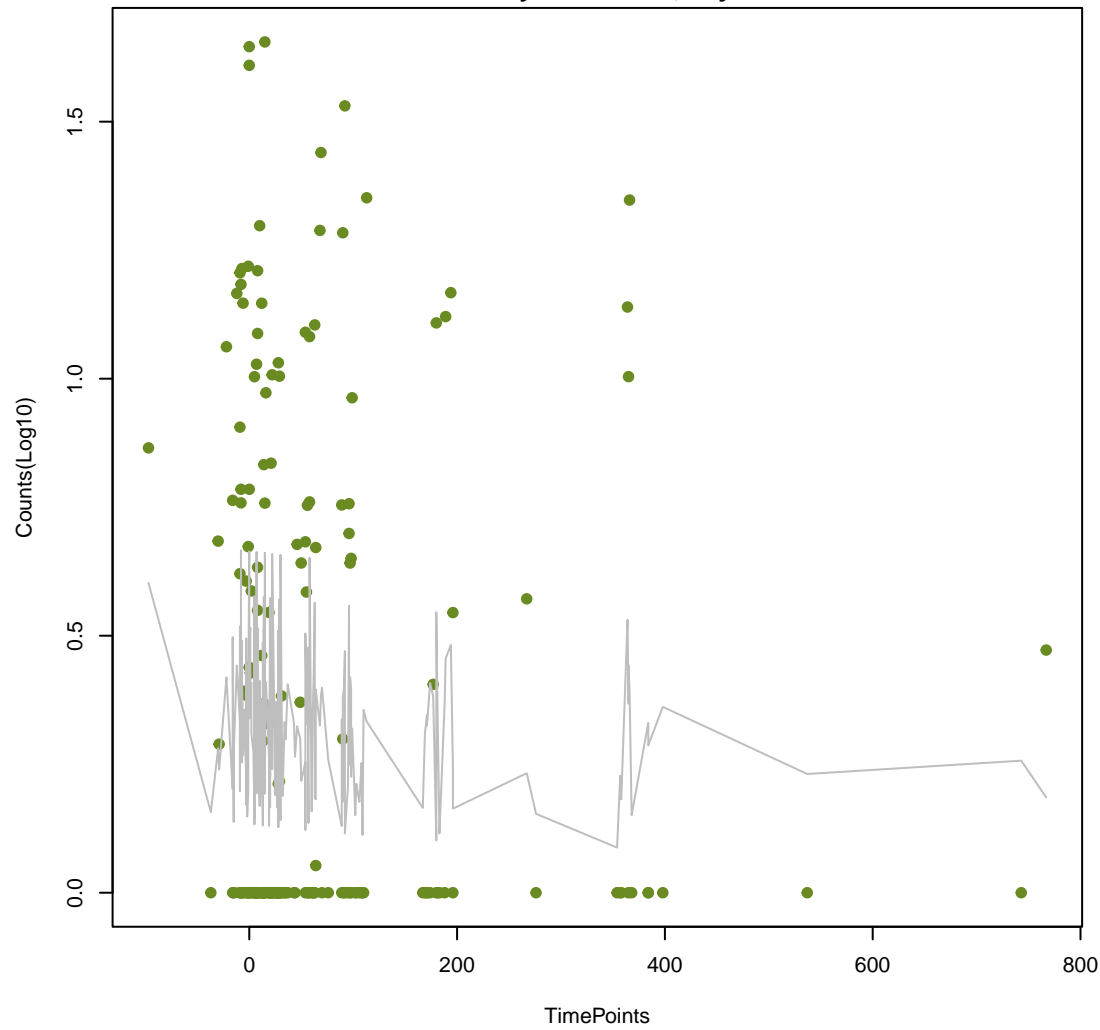
**glycopeptide resistance gene cluster;vanU**  
ANOVA P=0.882, adj. ANOVA-P=0.955  
Line vs. Poly F-P=1, adj. F-P=1



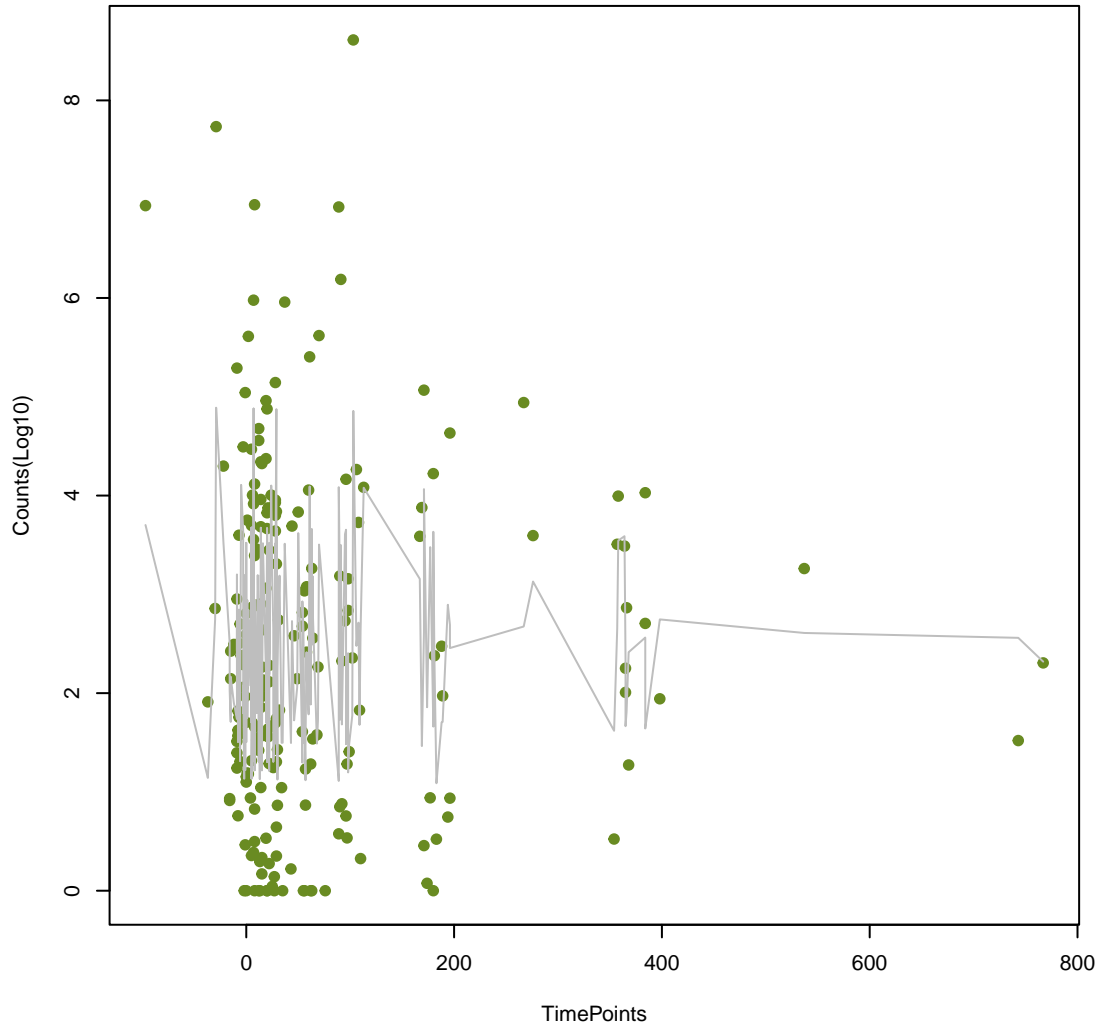
**small multidrug resistance (SMR) antibiotic efflux pump**  
ANOVA P=0.9, adj. ANOVA-P=0.961  
Line vs. Poly F-P=1, adj. F-P=1



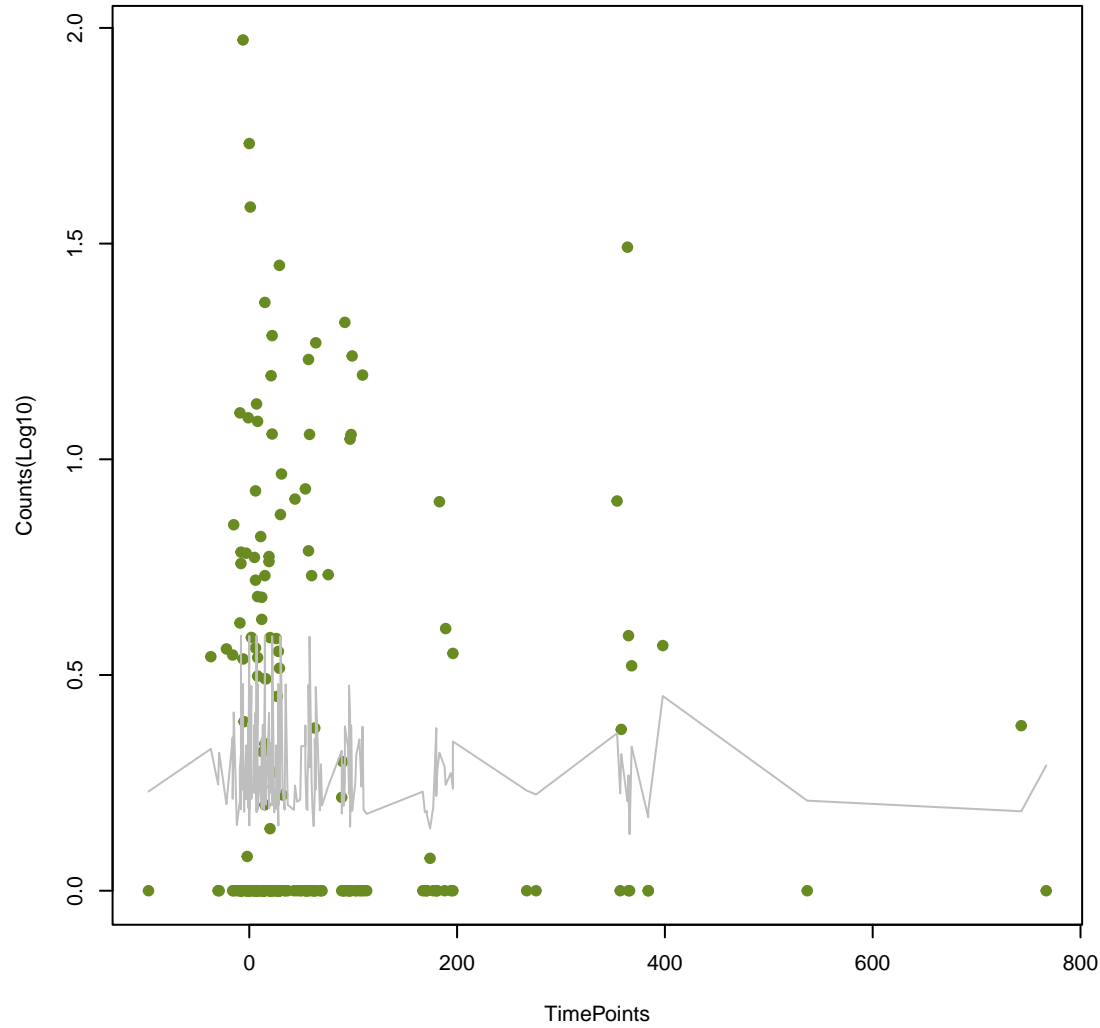
**Rm3 family beta-lactamase**  
ANOVA P=0.908, adj. ANOVA-P=0.961  
Line vs. Poly F-P=0.884, adj. F-P=1



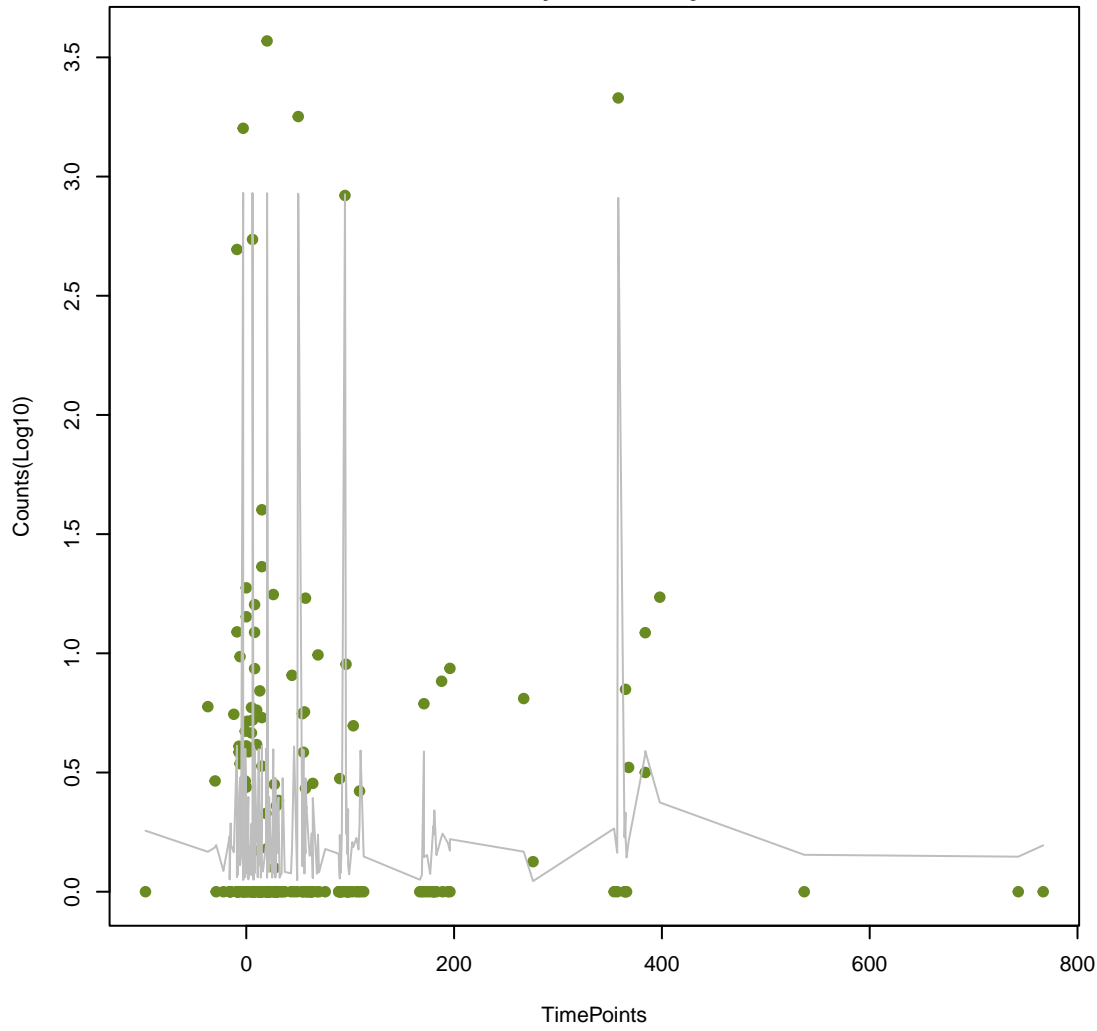
**Van ligase;glycopeptide resistance gene cluster**  
ANOVA P=0.961, adj. ANOVA-P=0.998  
Line vs. Poly F-P=1, adj. F-P=1



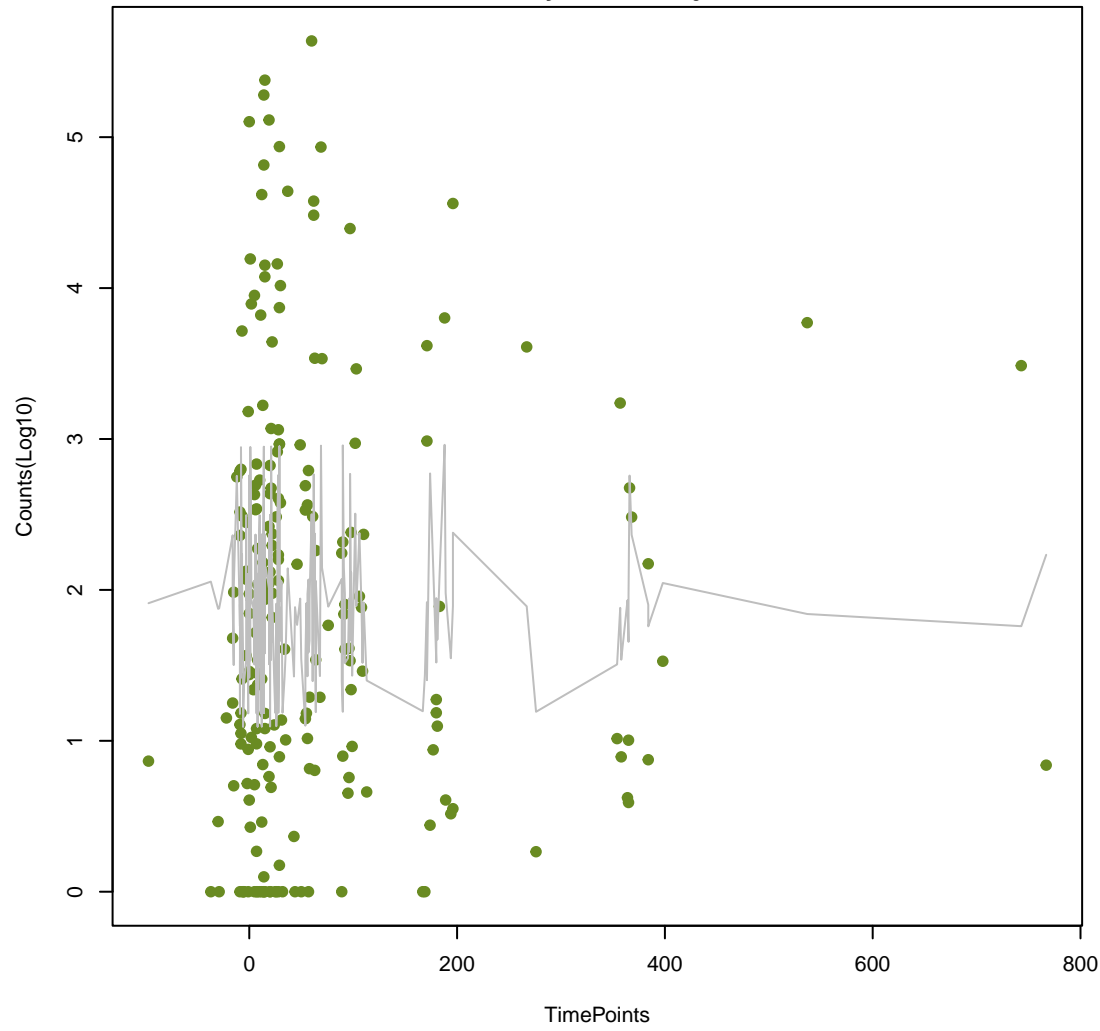
**CMY beta-lactamase**  
ANOVA P=0.965, adj. ANOVA-P=0.998  
Line vs. Poly F-P=1, adj. F-P=1



**macrolide esterase**  
ANOVA P=0.976, adj. ANOVA-P=0.998  
Line vs. Poly F-P=1, adj. F-P=1



**Isa-type ABC-F protein**  
ANOVA P=0.988, adj. ANOVA-P=0.999  
Line vs. Poly F-P=1, adj. F-P=1





IND beta-lactamase  
ANOVA P=0.999, adj. ANOVA-P=0.999  
Line vs. Poly F-P=0.975, adj. F-P=1

