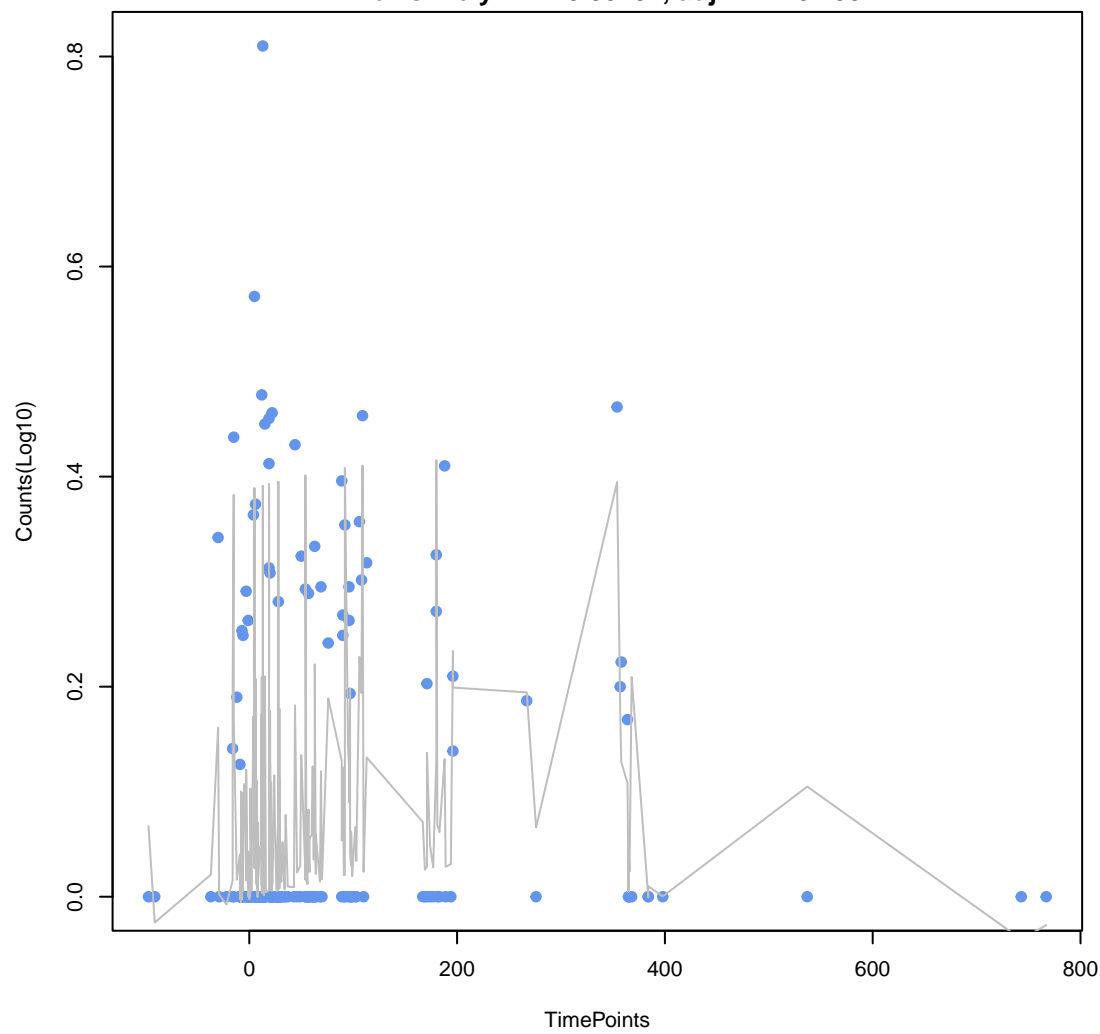
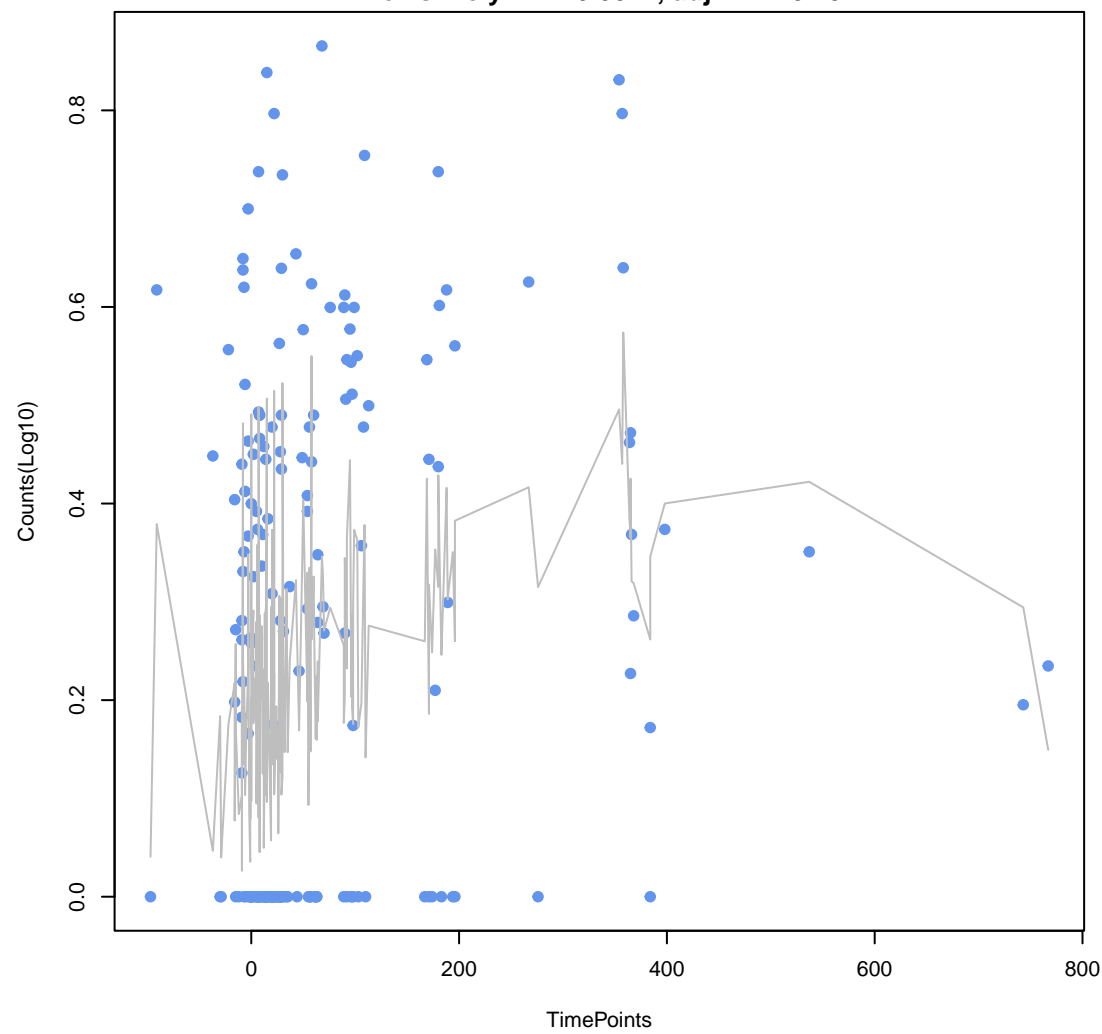


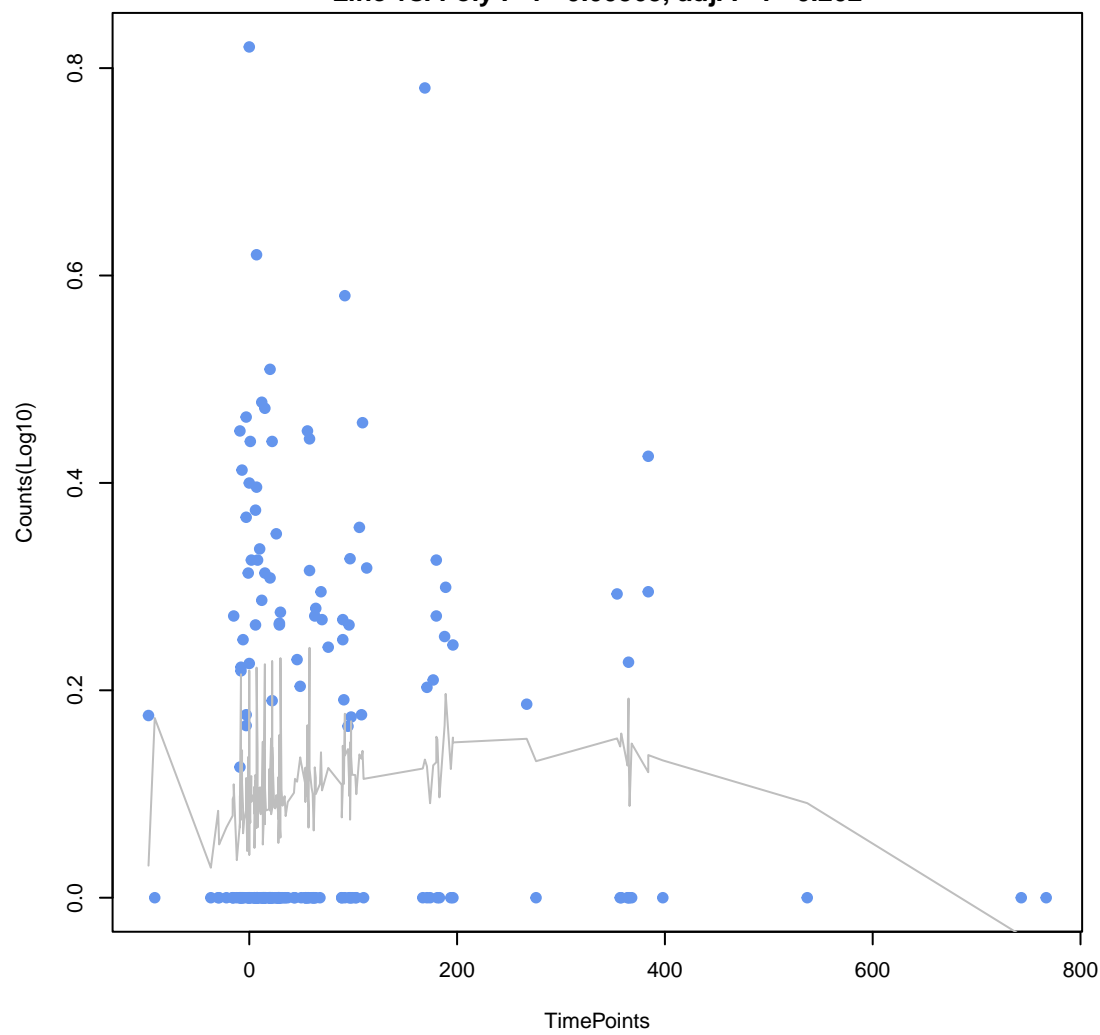
**vanR gene in vanE cluster**  
ANOVA  $P=0.0068$ , adj. ANOVA- $P=0.138$   
Line vs. Poly F- $P=0.00182$ , adj. F- $P=0.195$



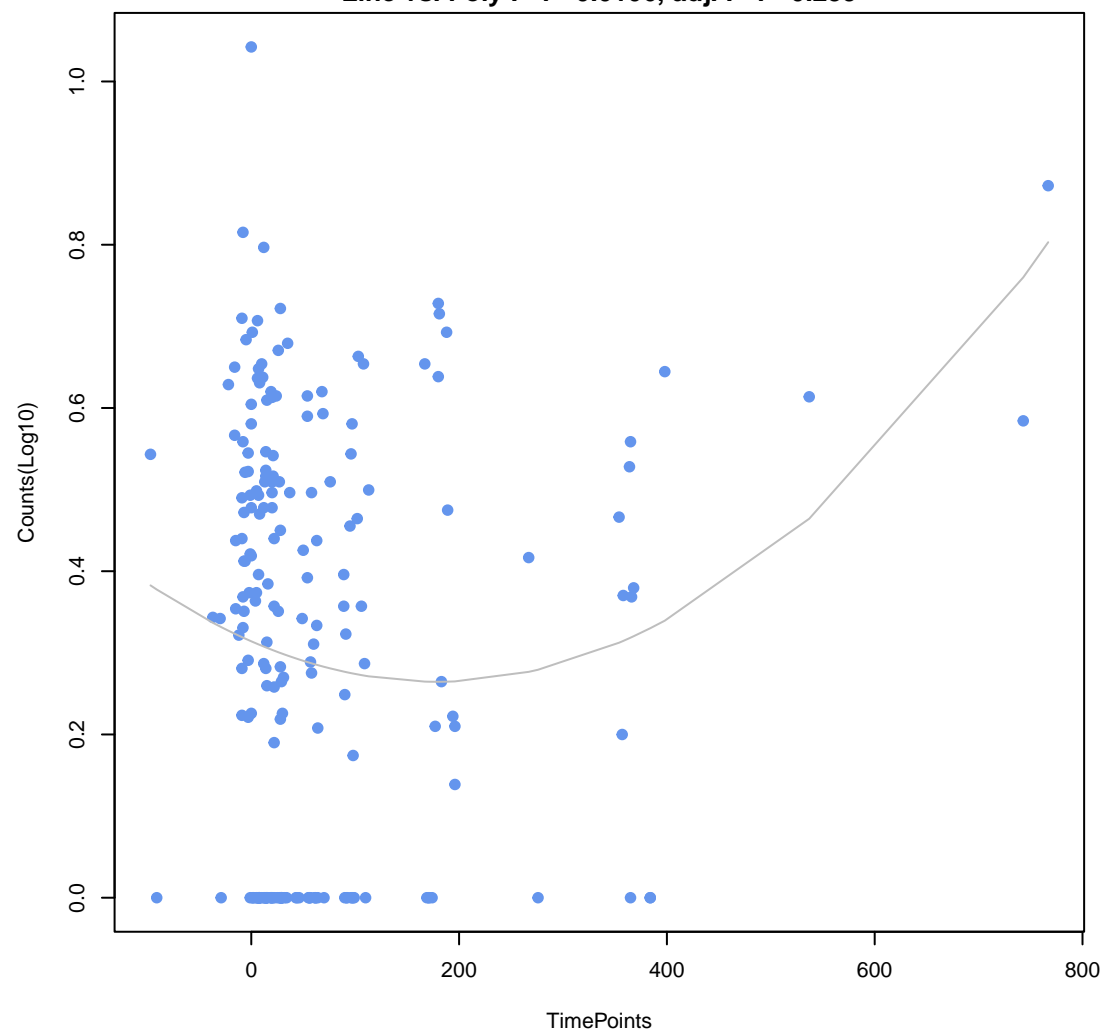
**nimJ**  
ANOVA  $P=0.000235$ , adj. ANOVA- $P=0.0126$   
Line vs. Poly F- $P=0.0041$ , adj. F- $P=0.202$



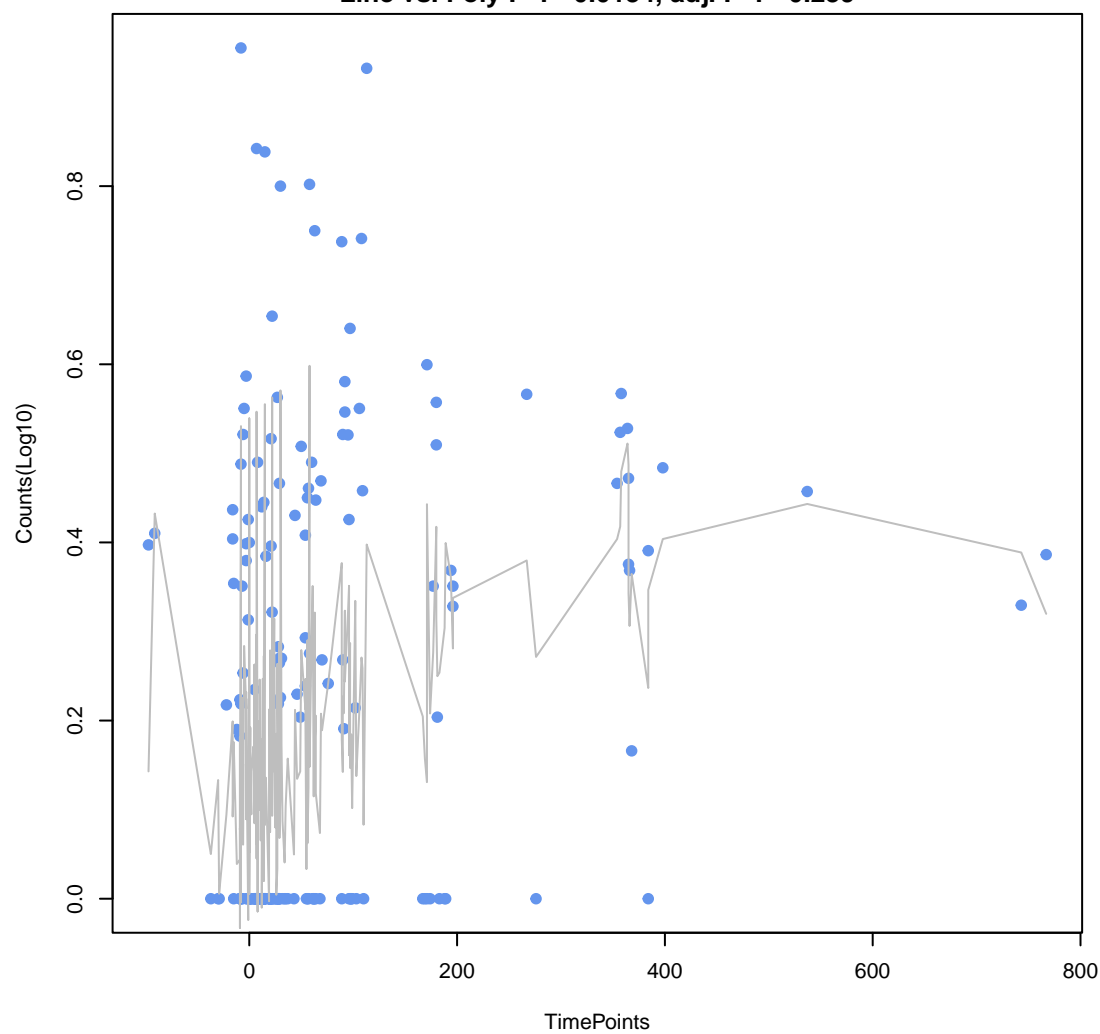
**farB**  
ANOVA  $P=0.107$ , adj. ANOVA- $P=0.51$   
Line vs. Poly F- $P=0.00565$ , adj. F- $P=0.202$



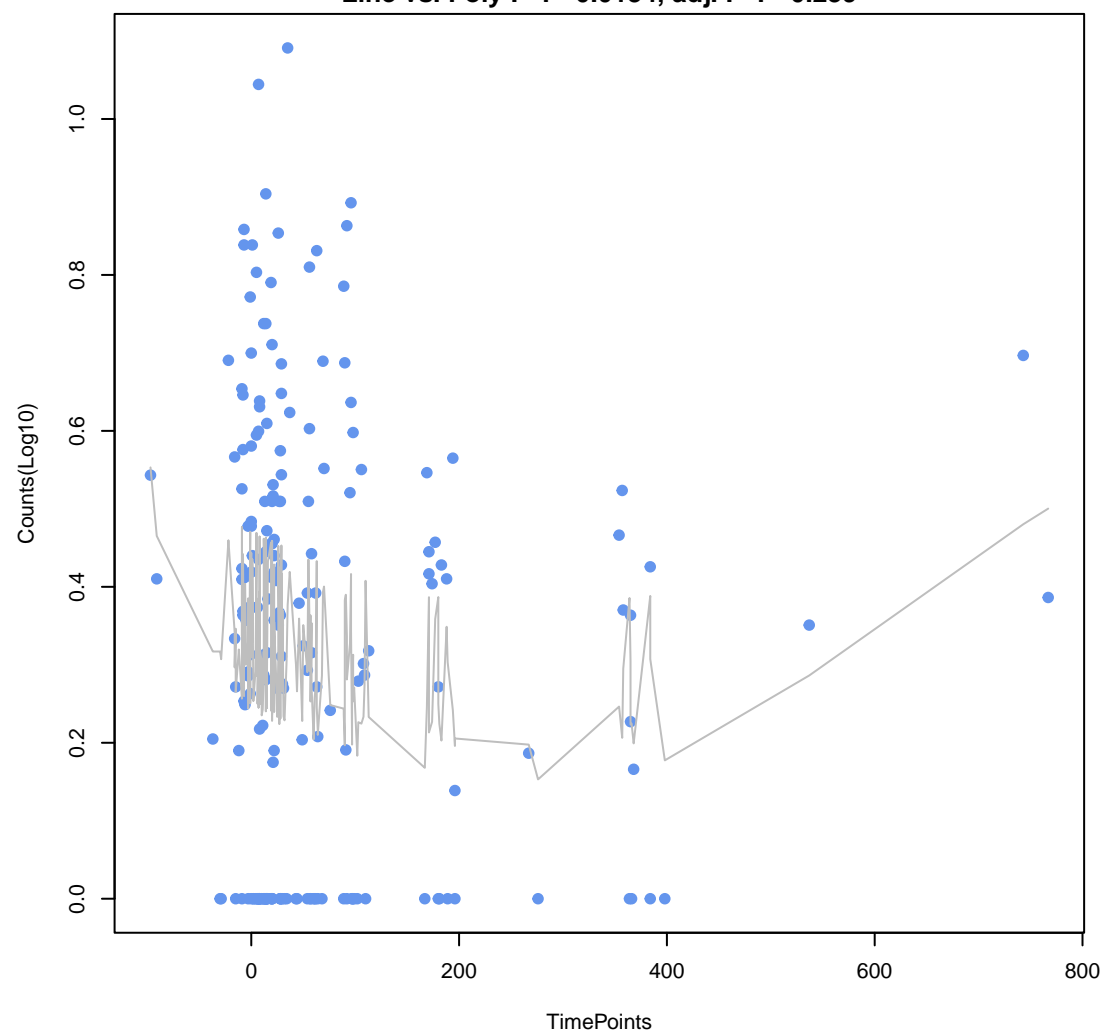
**BlaB-16**  
ANOVA  $P=0.0149$ , adj. ANOVA- $P=0.178$   
Line vs. Poly F- $P=0.0106$ , adj. F- $P=0.239$



**nimA**  
ANOVA  $P=5.28e-06$ , adj. ANOVA- $P=0.000565$   
Line vs. Poly F- $P=0.0134$ , adj. F- $P=0.239$

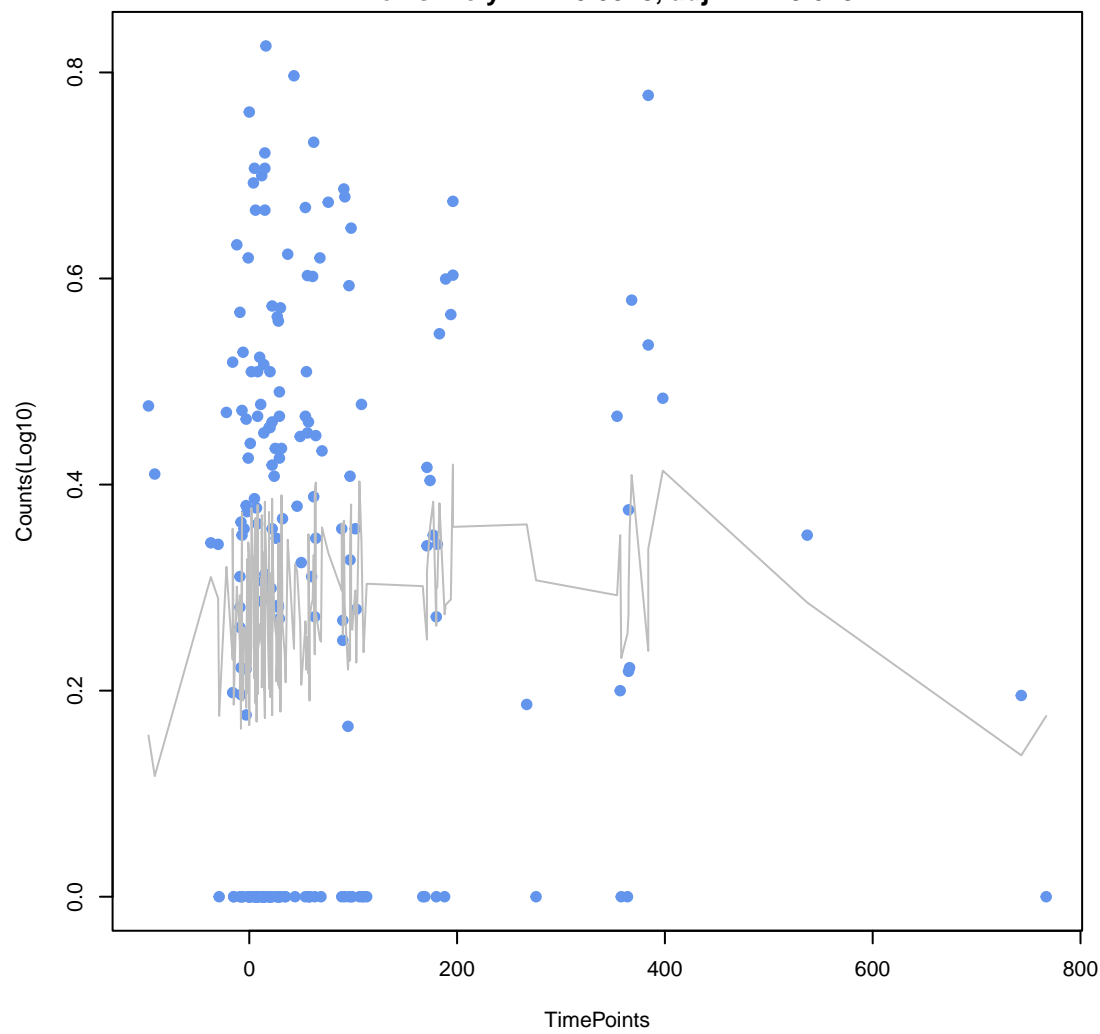


**Bifidobacterium adolescentis rpoB mutants conferring resistance to rifampicin**  
ANOVA  $P=0.0993$ , adj. ANOVA- $P=0.506$   
Line vs. Poly F- $P=0.0134$ , adj. F- $P=0.239$



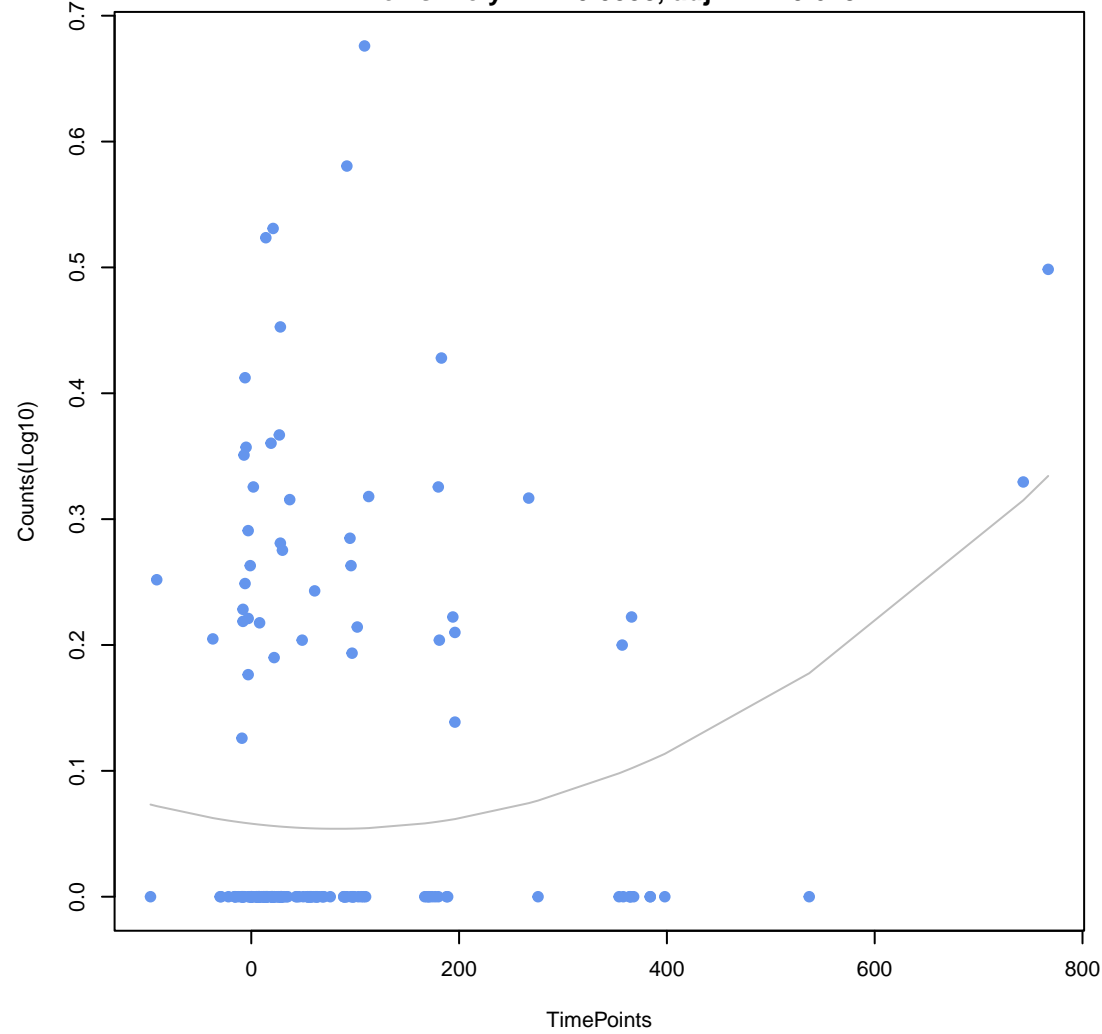
**acrB**

ANOVA P=0.272, adj. ANOVA-P=0.758  
Line vs. Poly F-P=0.0543, adj. F-P=0.648



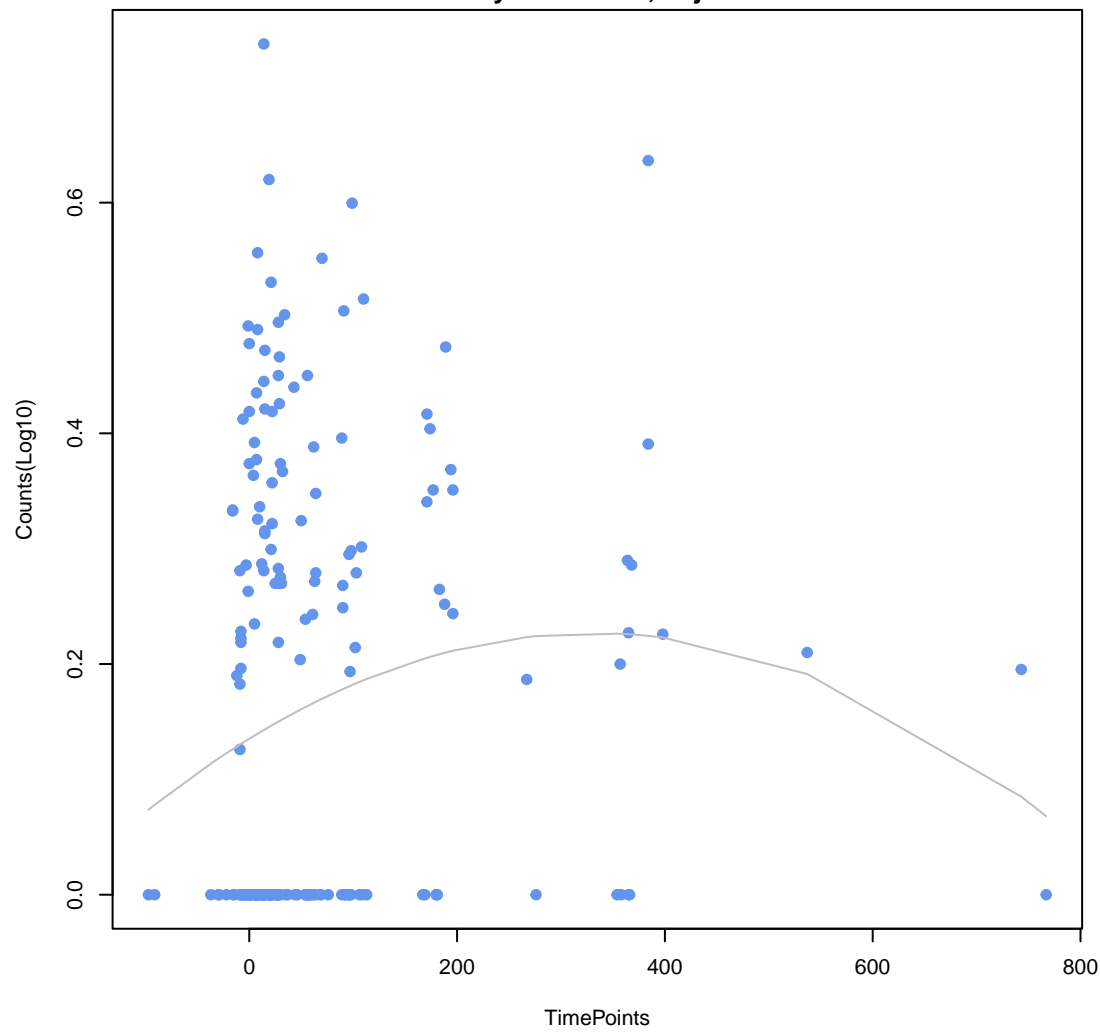
**adeA**

ANOVA P=0.0069, adj. ANOVA-P=0.138  
Line vs. Poly F-P=0.0558, adj. F-P=0.648



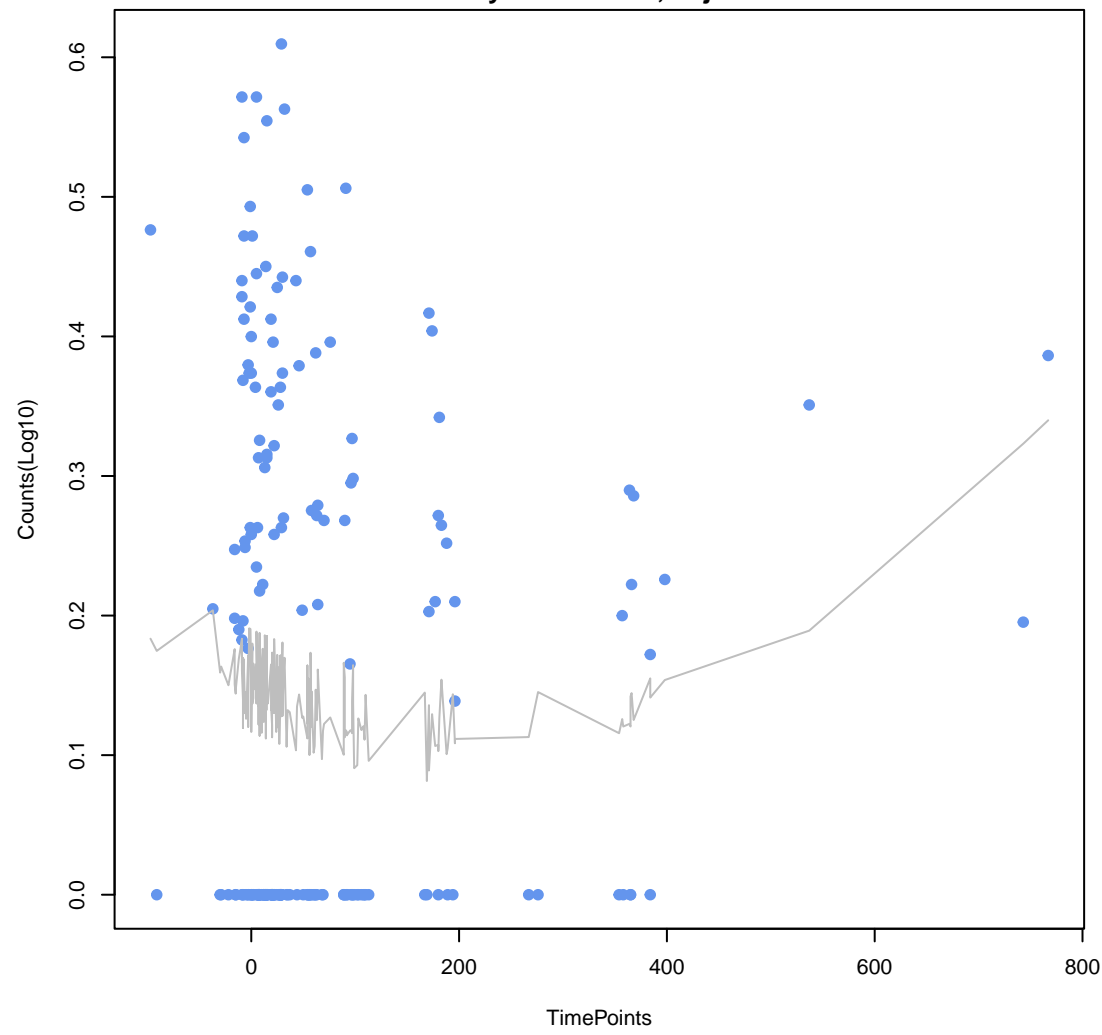
**mdtM**

ANOVA P=0.0748, adj. ANOVA-P=0.432  
Line vs. Poly F-P=0.062, adj. F-P=0.648



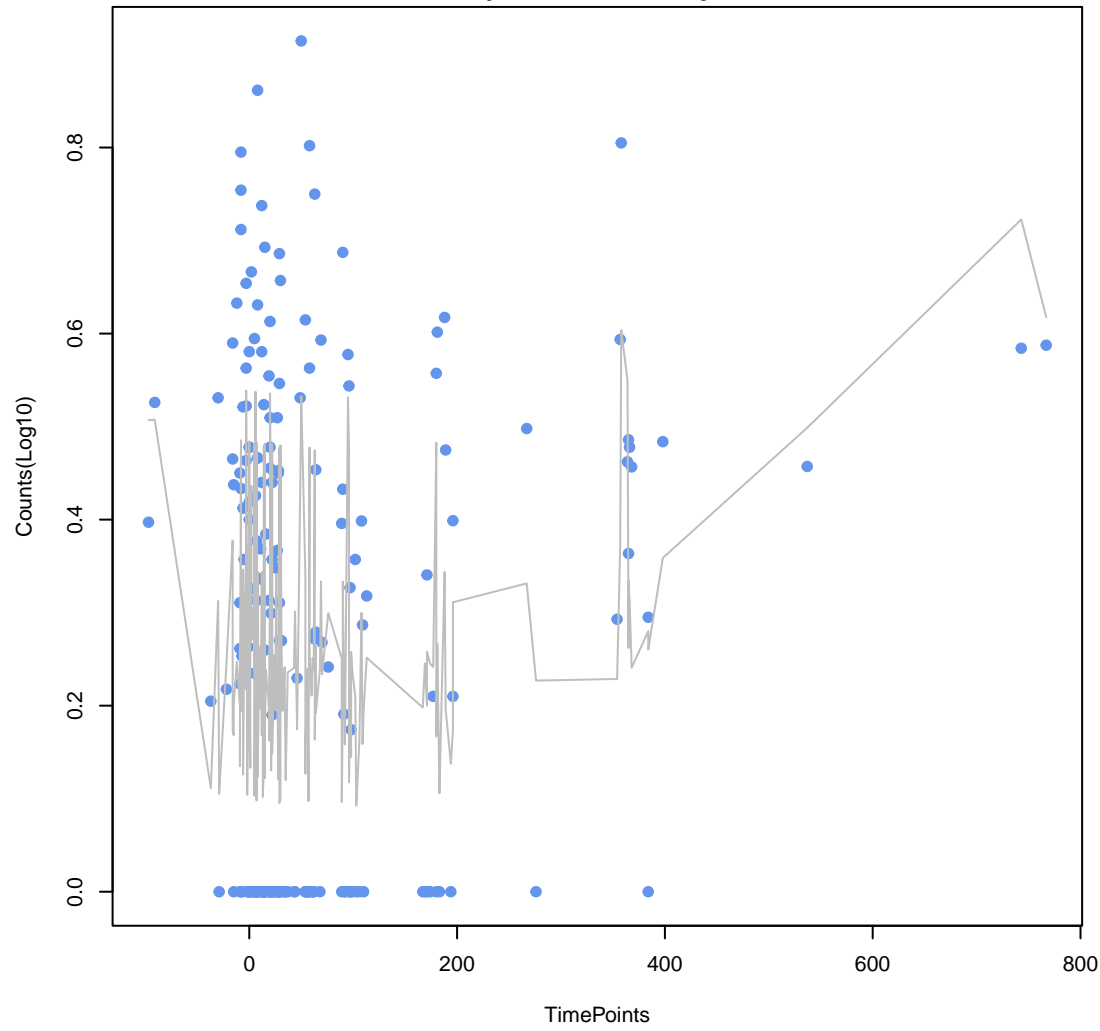
**YojI**

ANOVA P=0.175, adj. ANOVA-P=0.625  
Line vs. Poly F-P=0.0631, adj. F-P=0.648



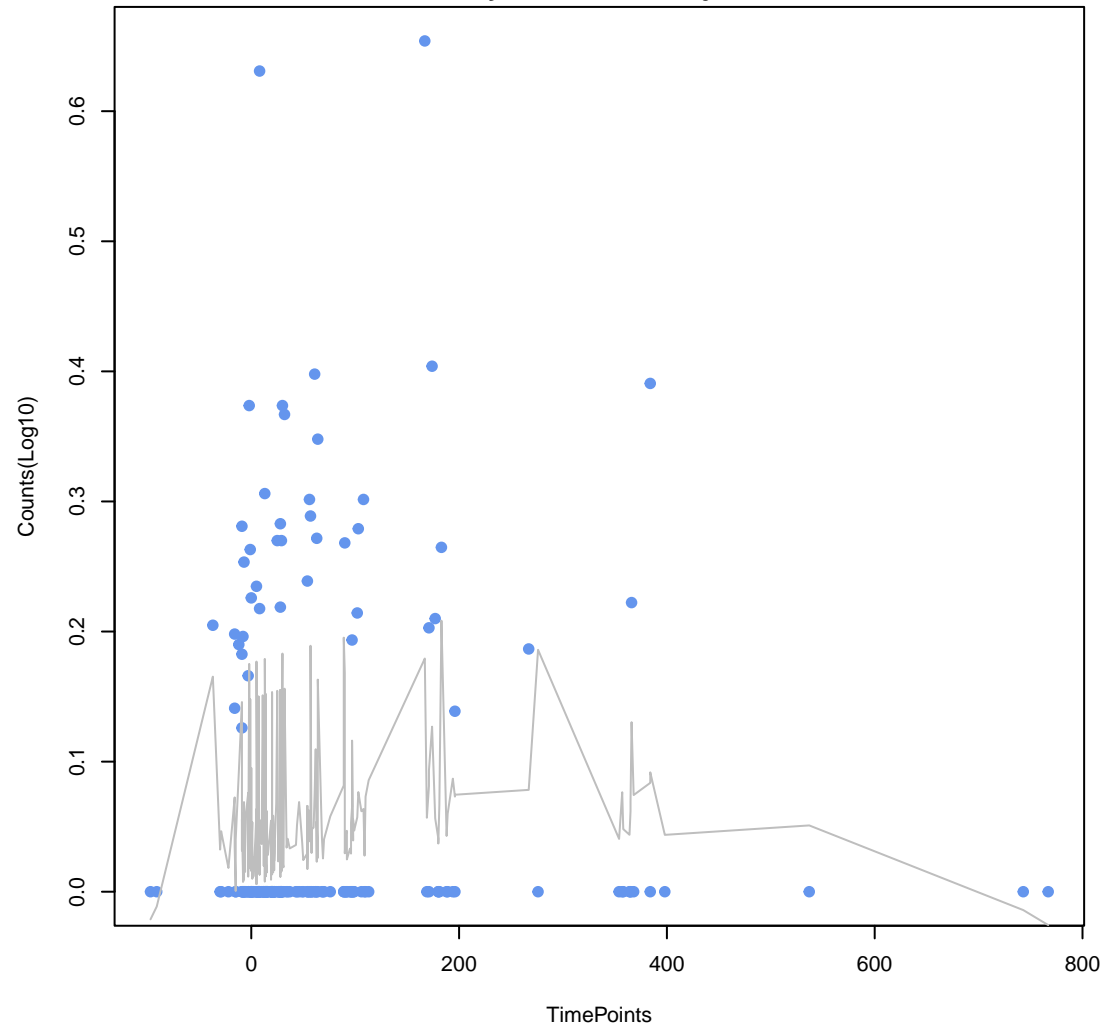
**mefH**

ANOVA P=0.0137, adj. ANOVA-P=0.178  
Line vs. Poly F-P=0.0666, adj. F-P=0.648

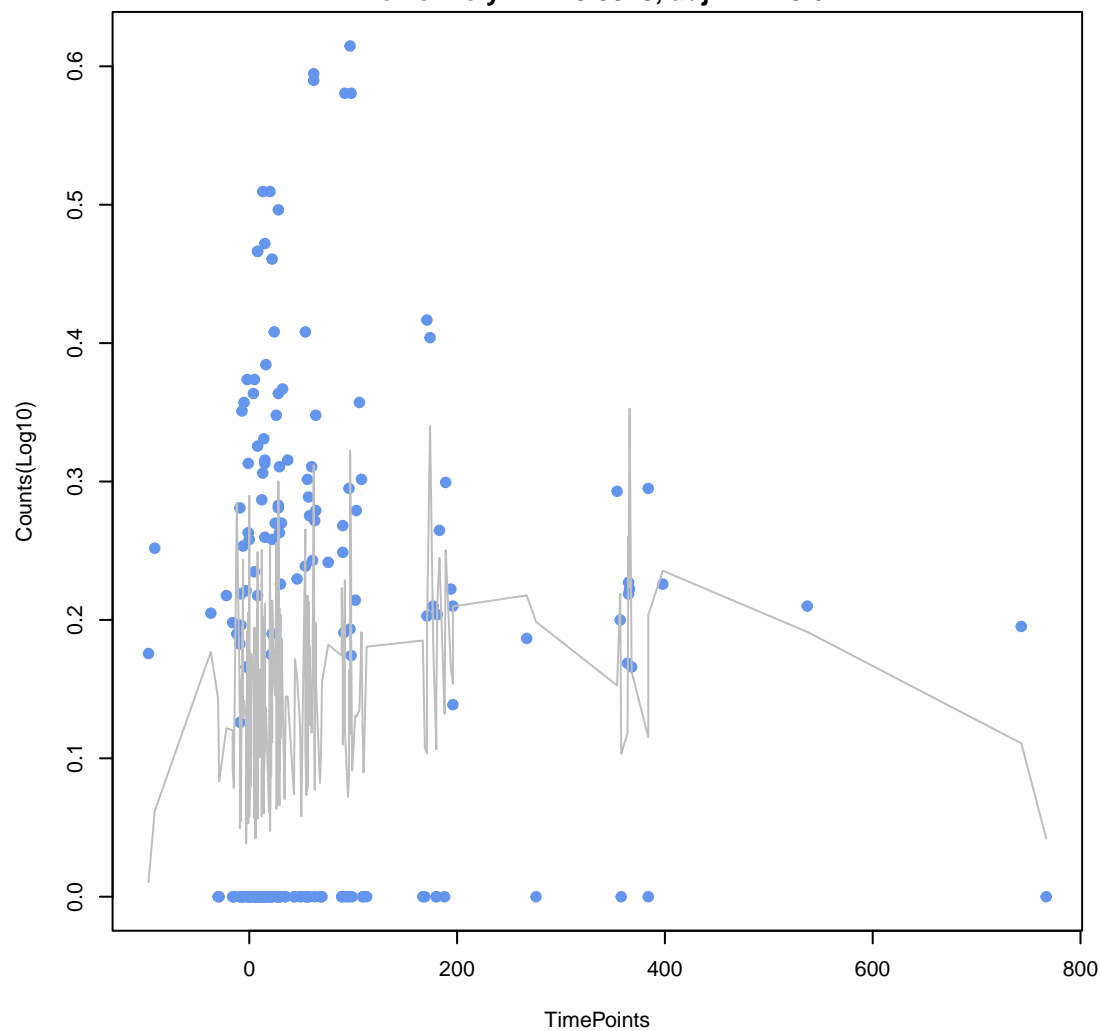


**Escherichia coli GlpT with mutation conferring resistance to fosfomycin**

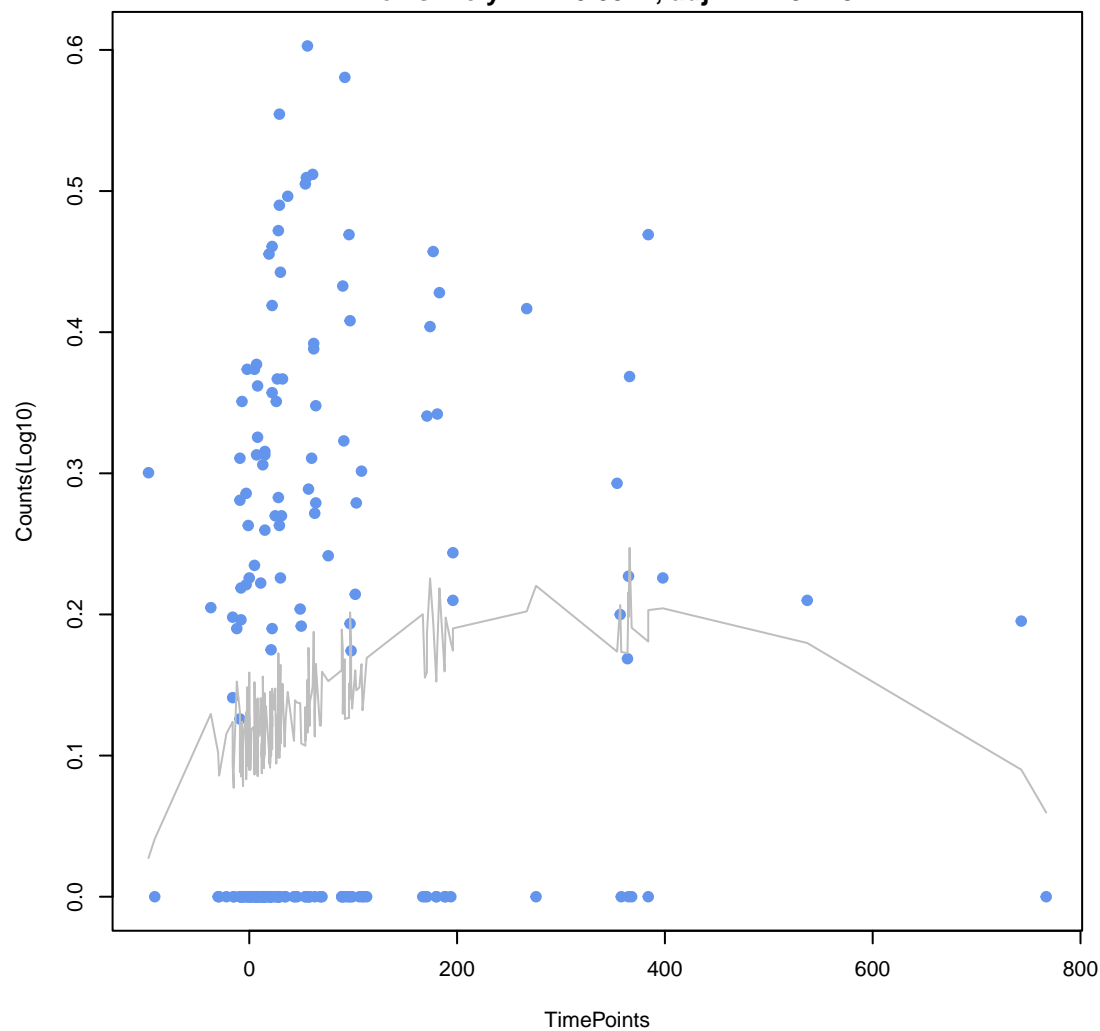
ANOVA P=0.185, adj. ANOVA-P=0.637  
Line vs. Poly F-P=0.0777, adj. F-P=0.677



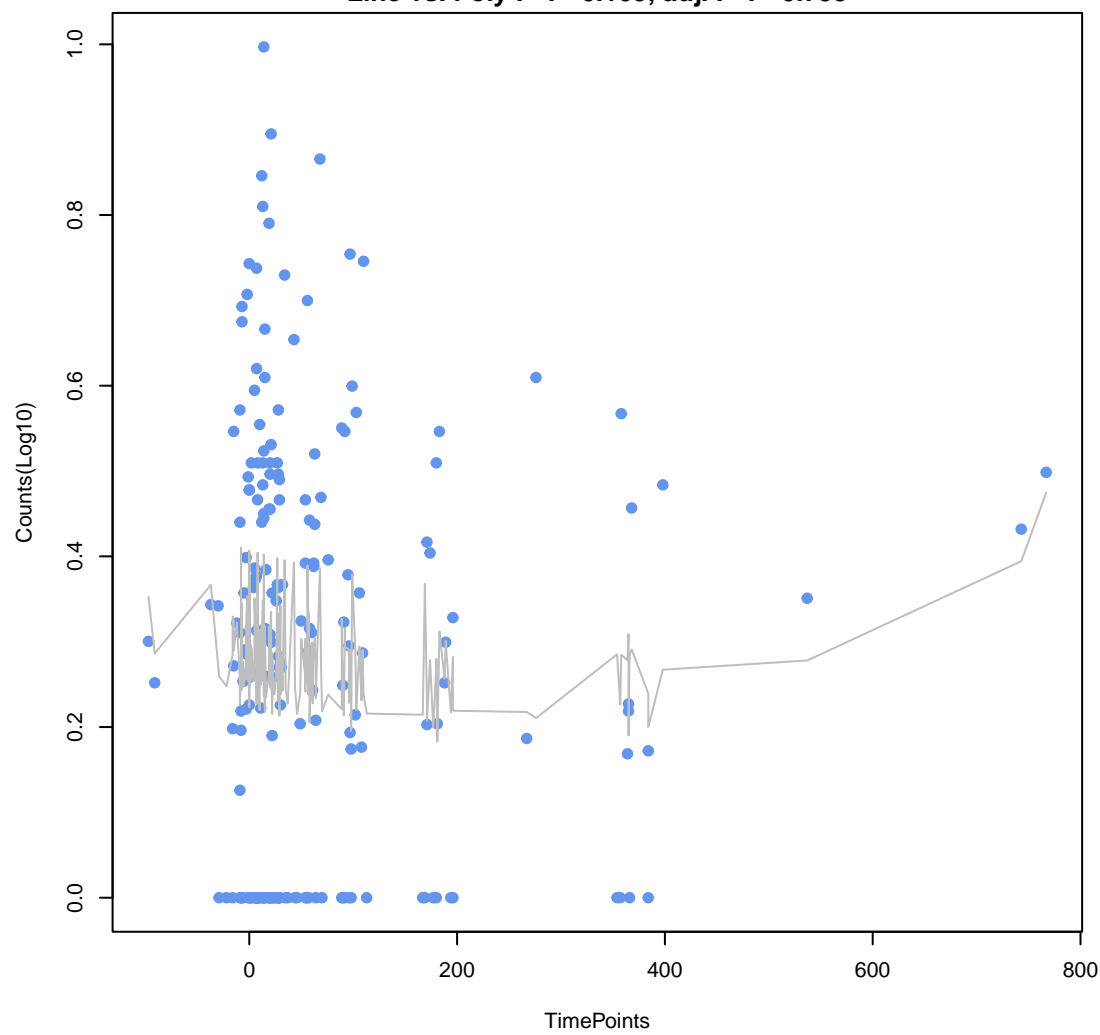
**Escherichia coli EF-Tu mutants conferring resistance to Pulvomycin**  
ANOVA P=0.128, adj. ANOVA-P=0.526  
Line vs. Poly F-P=0.0823, adj. F-P=0.677



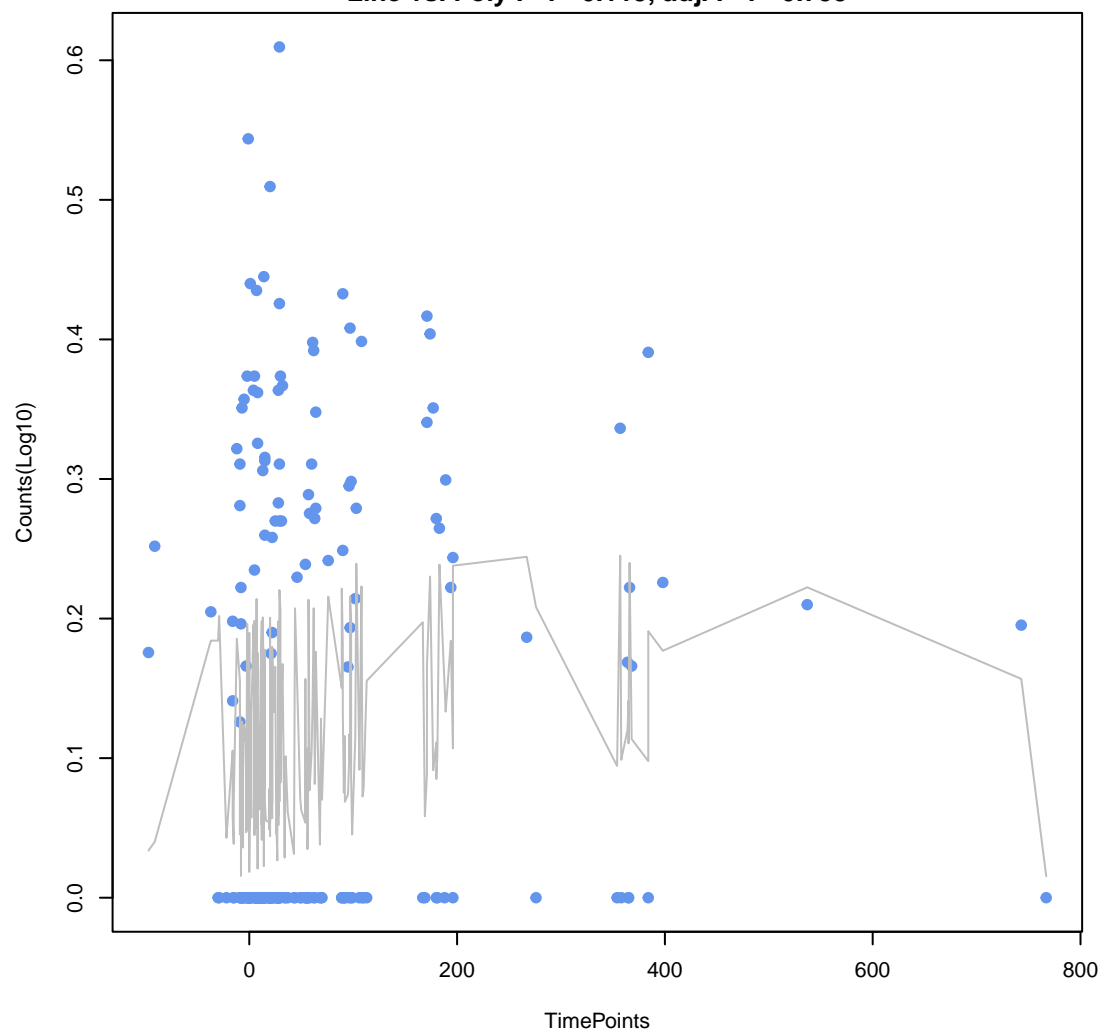
**emrB**  
ANOVA P=0.0571, adj. ANOVA-P=0.432  
Line vs. Poly F-P=0.0974, adj. F-P=0.745



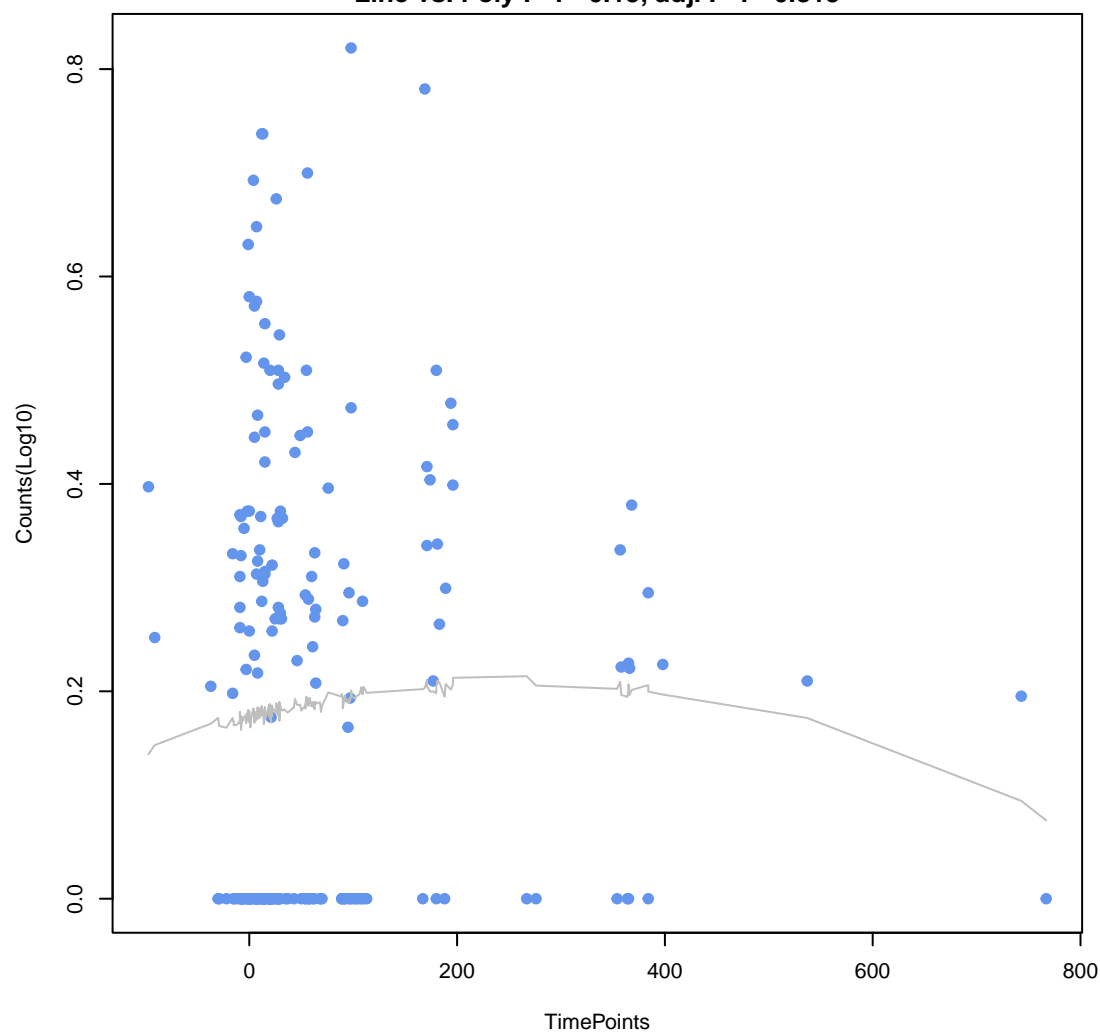
**efrB**  
ANOVA P=0.447, adj. ANOVA-P=0.803  
Line vs. Poly F-P=0.109, adj. F-P=0.755



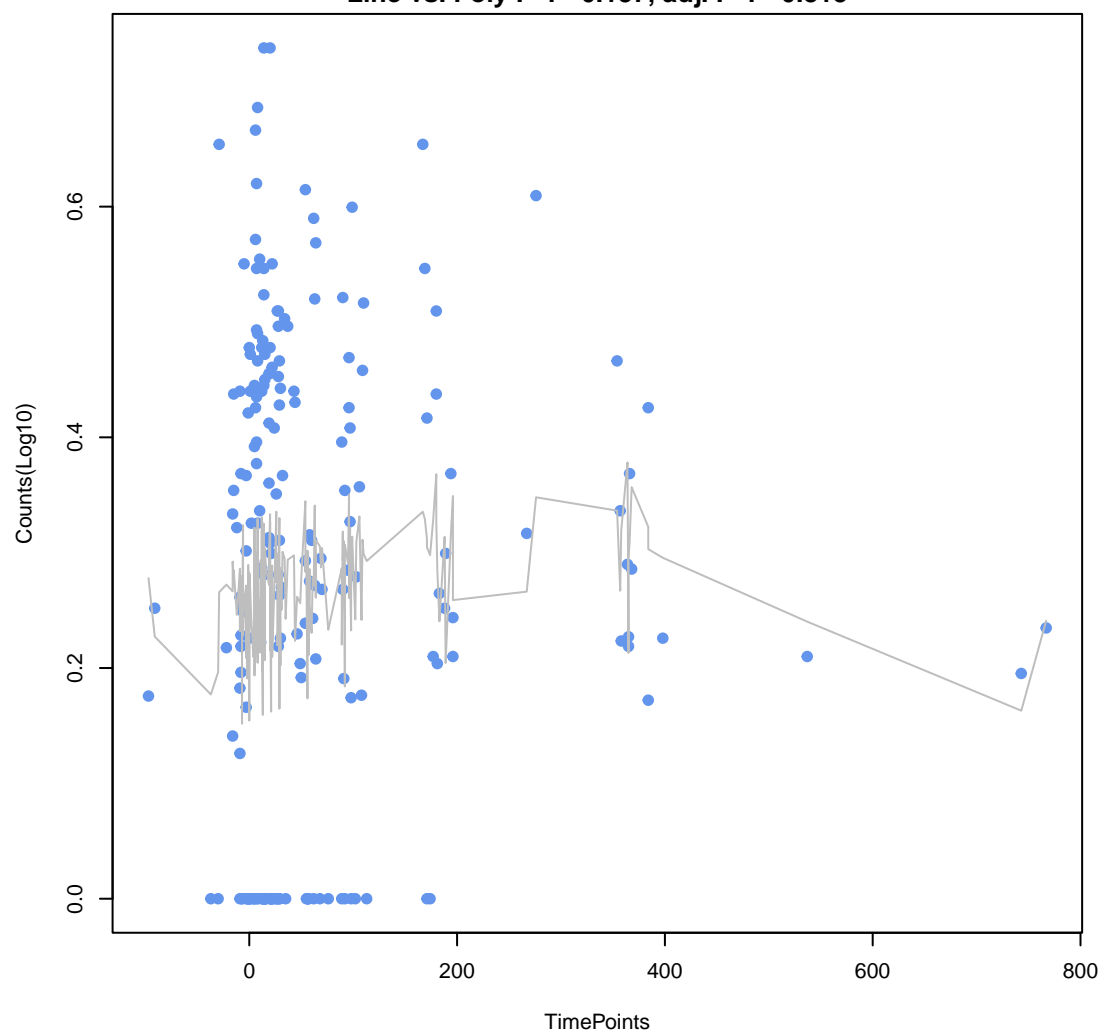
**Escherichia coli soxS with mutation conferring antibiotic resistance**  
ANOVA P=0.226, adj. ANOVA-P=0.684  
Line vs. Poly F-P=0.113, adj. F-P=0.755



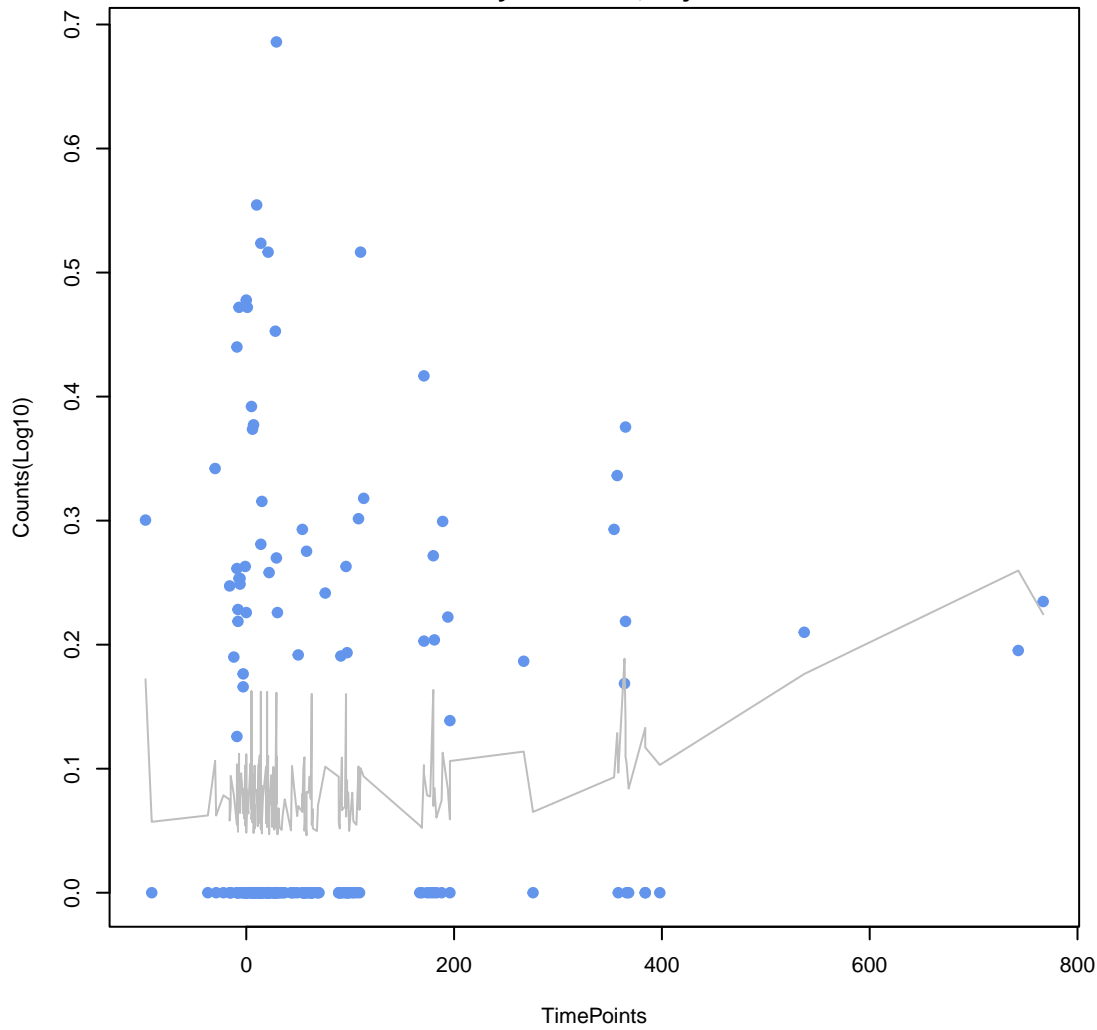
**ToIC**  
ANOVA P=0.612, adj. ANOVA-P=0.832  
Line vs. Poly F-P=0.13, adj. F-P=0.813



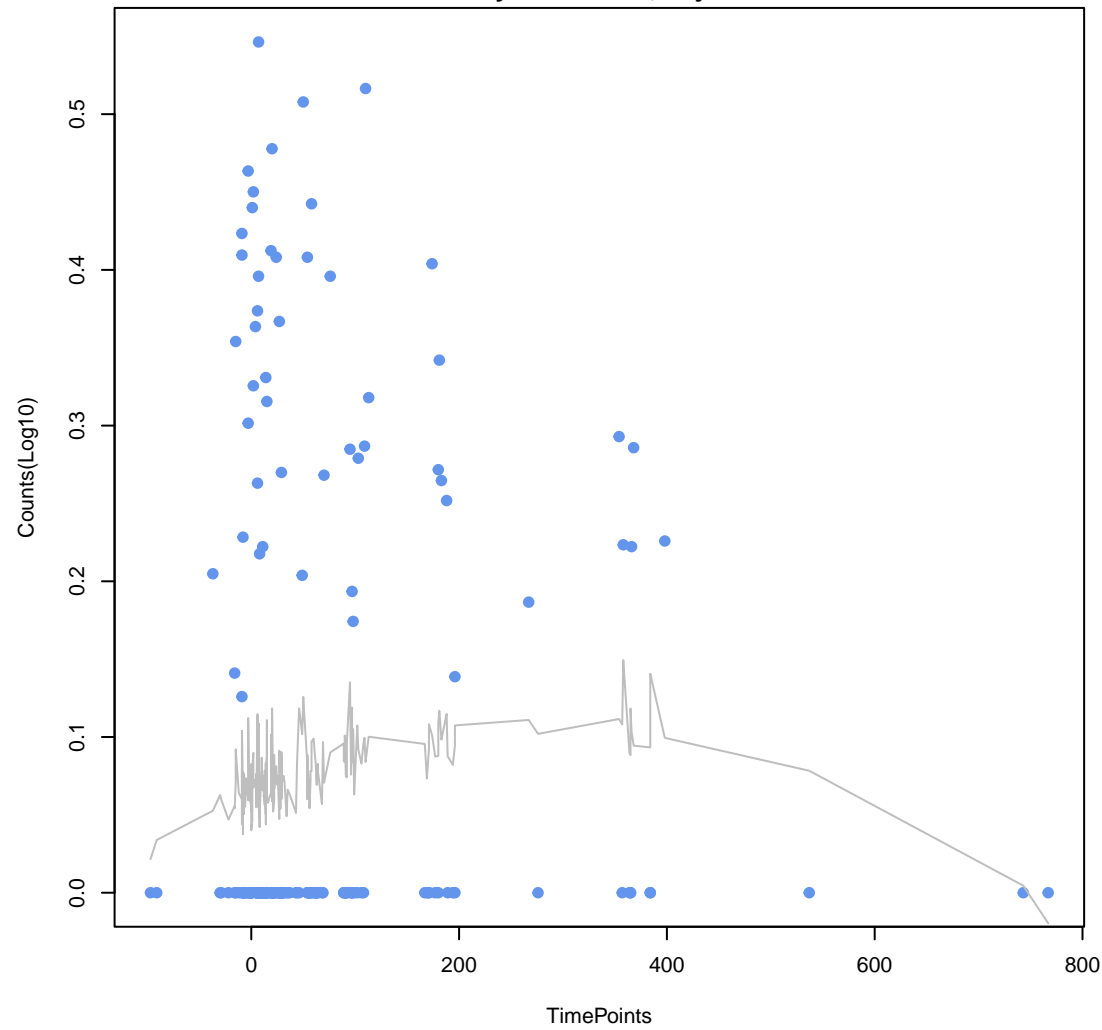
**SAT-4**  
ANOVA P=0.341, adj. ANOVA-P=0.777  
Line vs. Poly F-P=0.137, adj. F-P=0.813



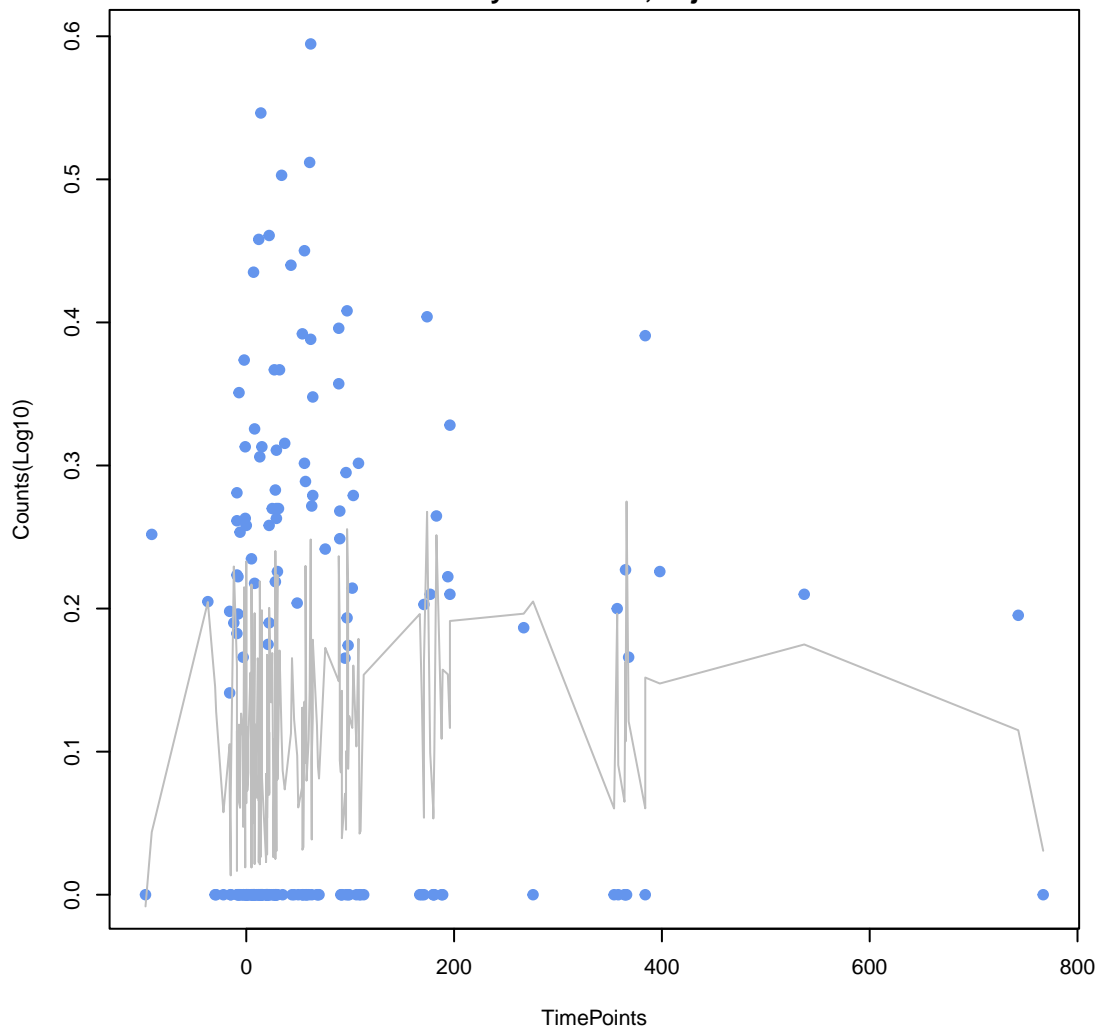
**Streptomyces rimosus otr(A)**  
ANOVA P=0.218, adj. ANOVA-P=0.684  
Line vs. Poly F-P=0.16, adj. F-P=0.865



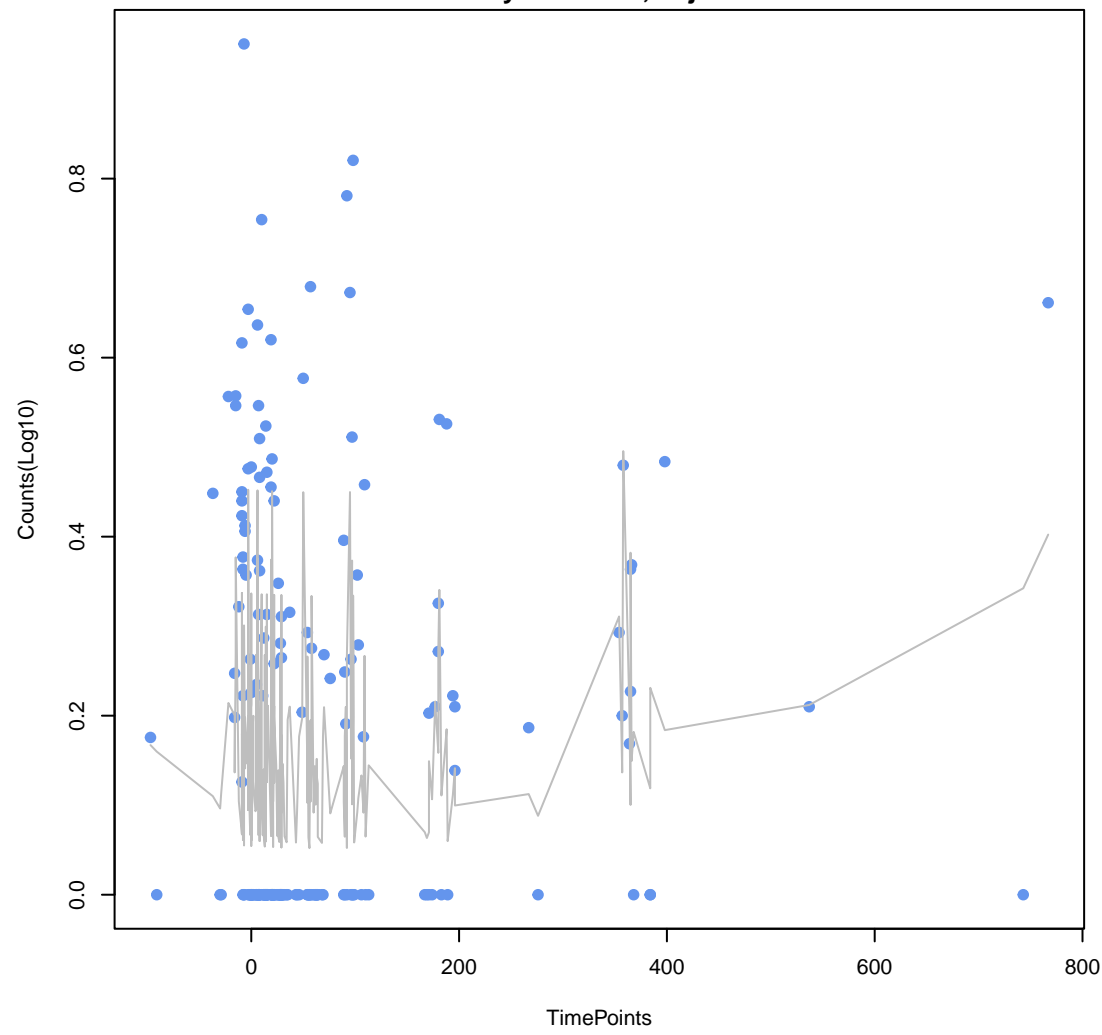
**mtrD**  
ANOVA P=0.31, adj. ANOVA-P=0.773  
Line vs. Poly F-P=0.162, adj. F-P=0.865



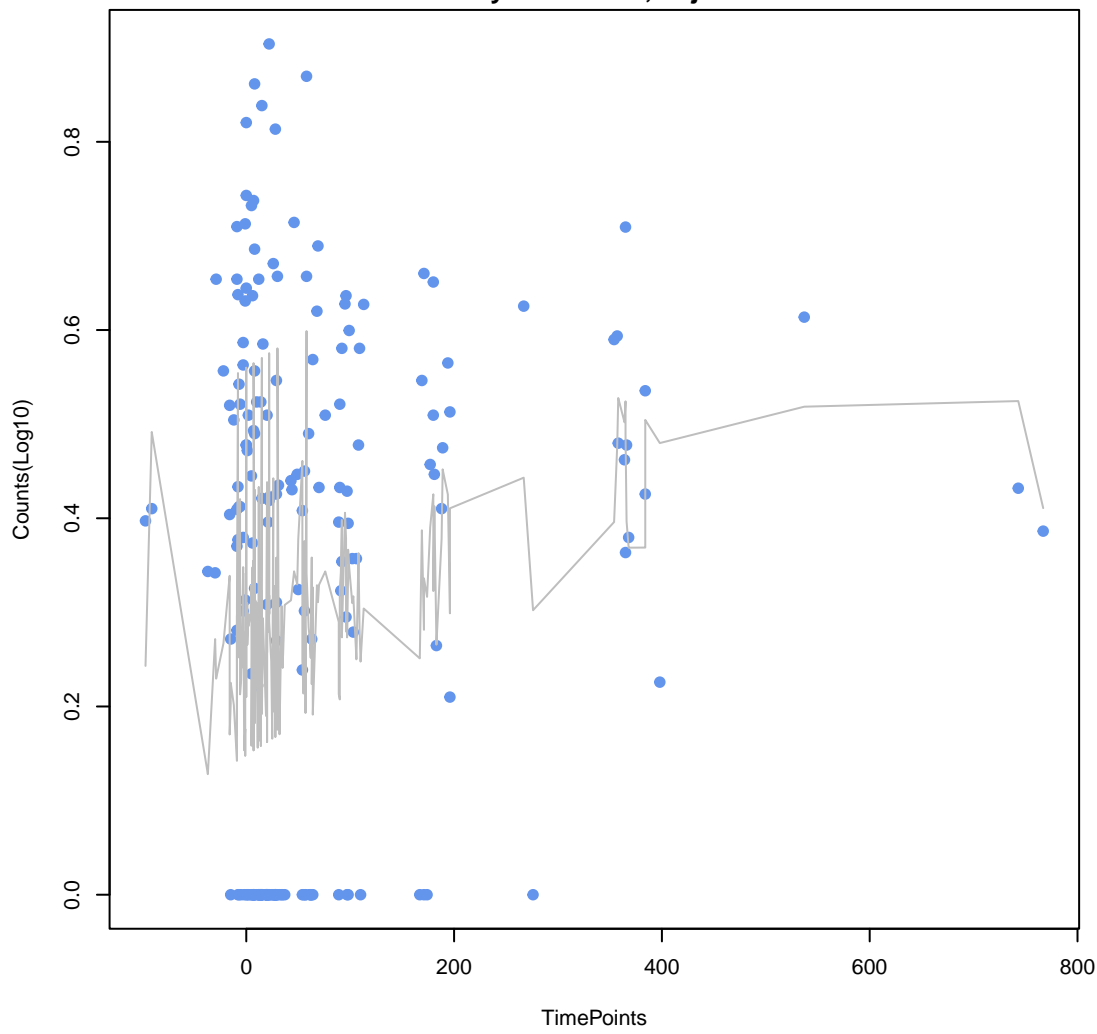
**H-NS**  
ANOVA P=0.309, adj. ANOVA-P=0.773  
Line vs. Poly F-P=0.173, adj. F-P=0.879



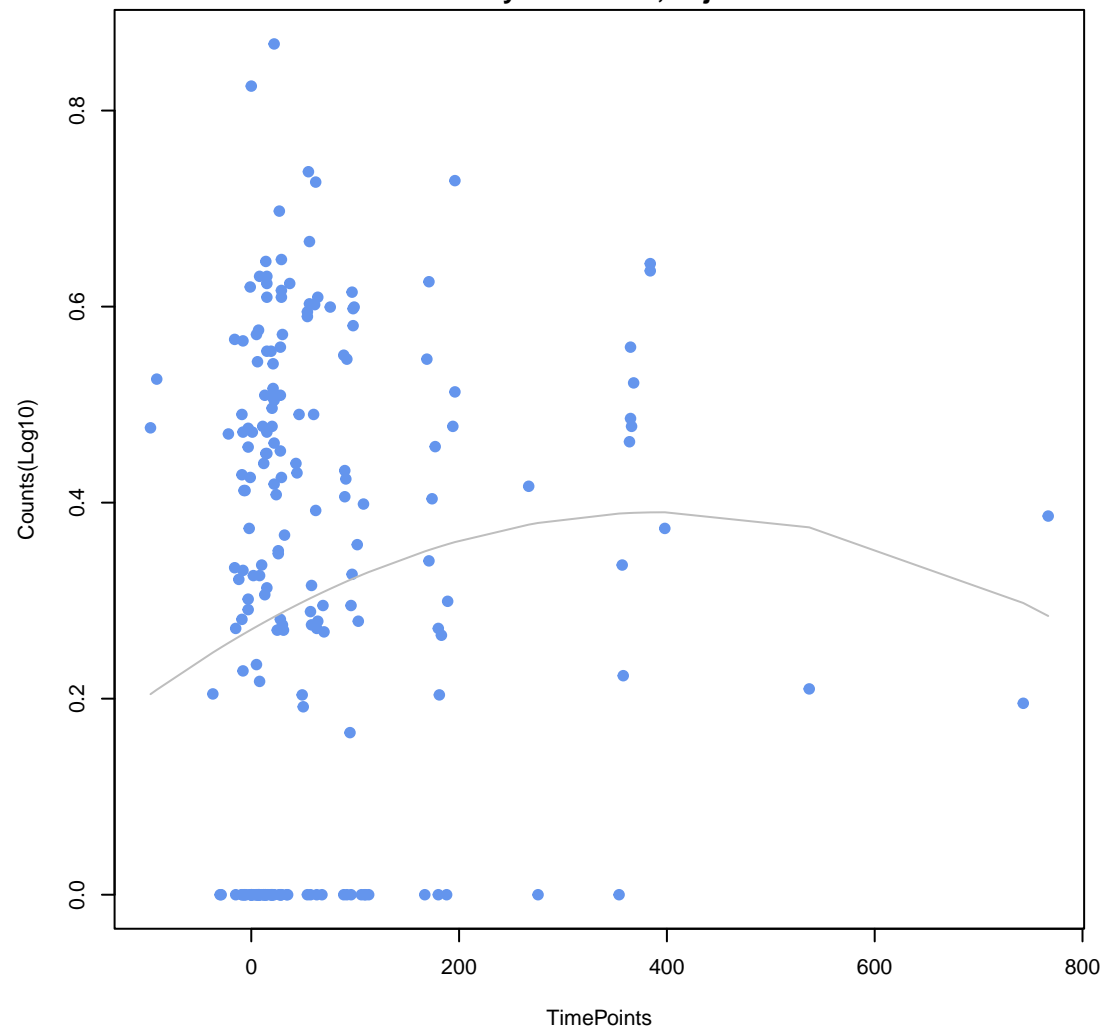
**APH(6)-lc**  
ANOVA P=0.127, adj. ANOVA-P=0.526  
Line vs. Poly F-P=0.19, adj. F-P=0.913



**tet(36)**  
ANOVA P=0.00772, adj. ANOVA-P=0.138  
Line vs. Poly F-P=0.196, adj. F-P=0.913

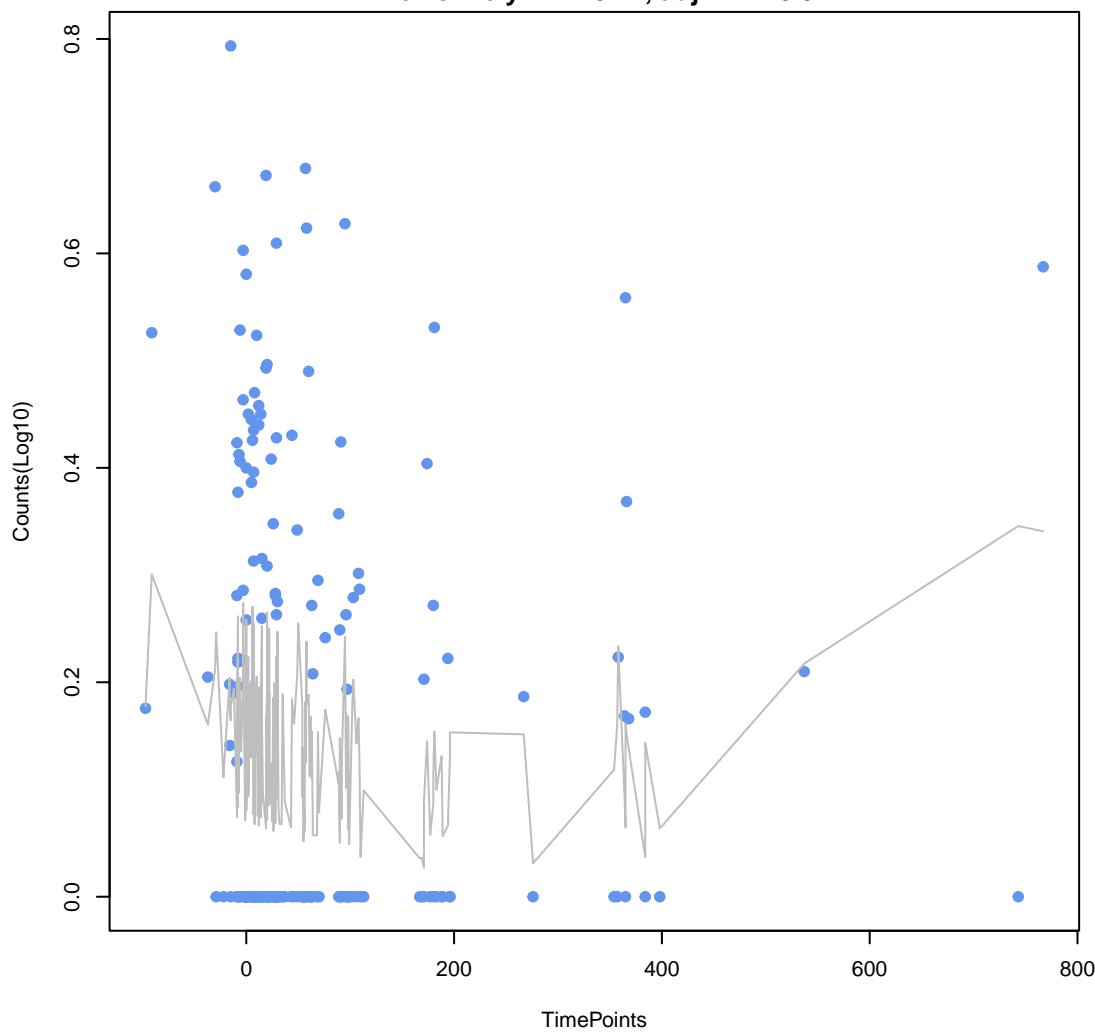


**mdtB**  
ANOVA P=0.11, adj. ANOVA-P=0.51  
Line vs. Poly F-P=0.217, adj. F-P=0.94



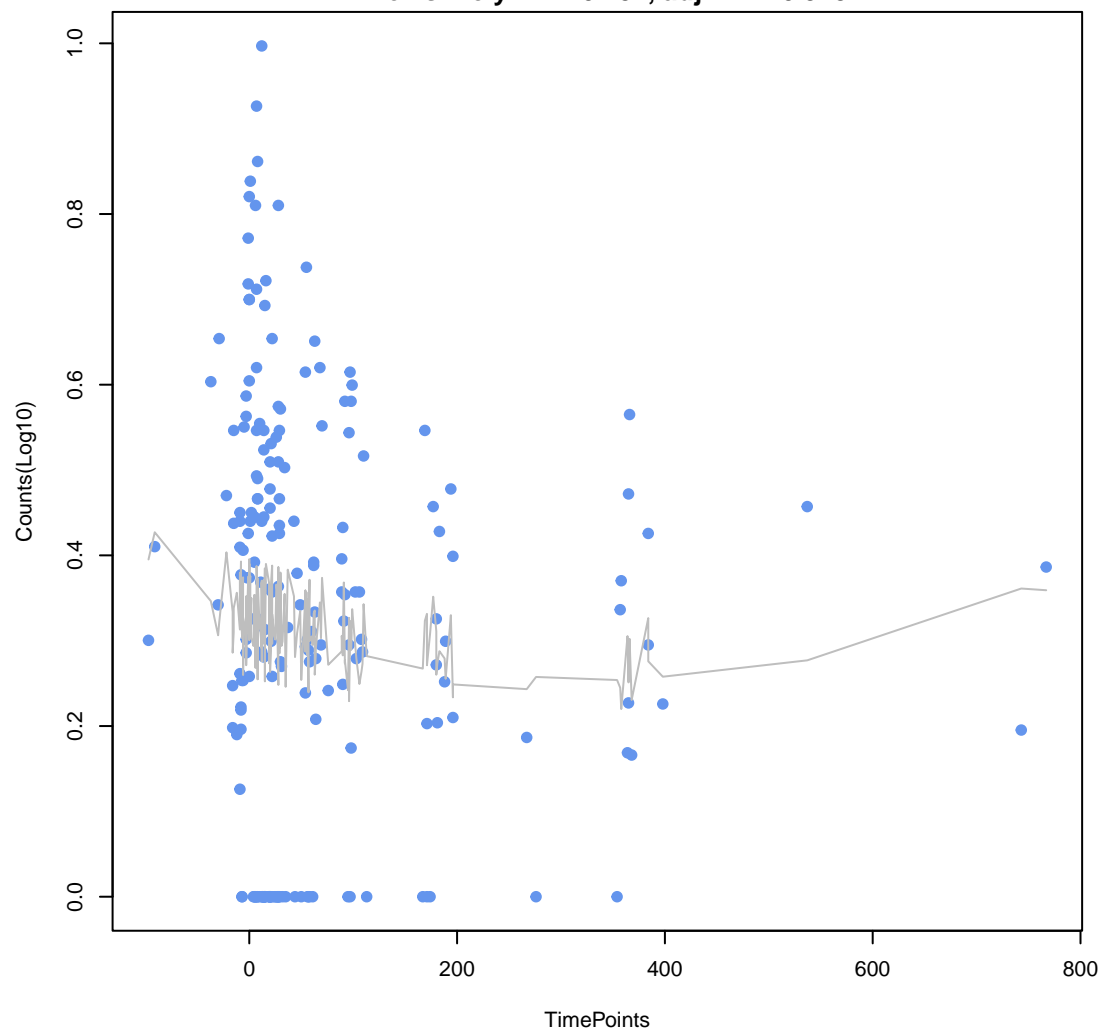
**PDC-402**

ANOVA  $P=0.213$ , adj. ANOVA- $P=0.684$   
Line vs. Poly F- $P=0.22$ , adj. F- $P=0.94$



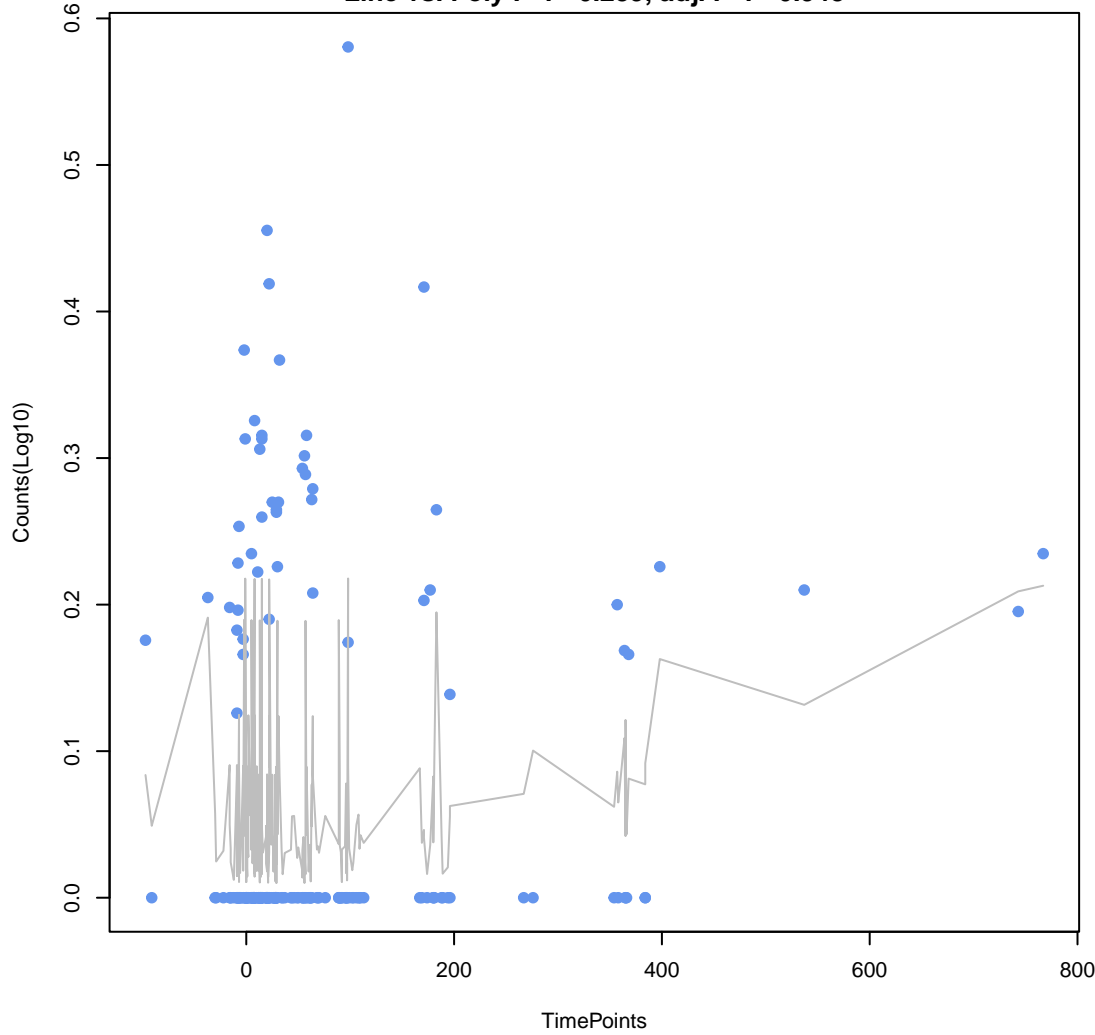
**tetB(46)**

ANOVA  $P=0.507$ , adj. ANOVA- $P=0.803$   
Line vs. Poly F- $P=0.231$ , adj. F- $P=0.948$



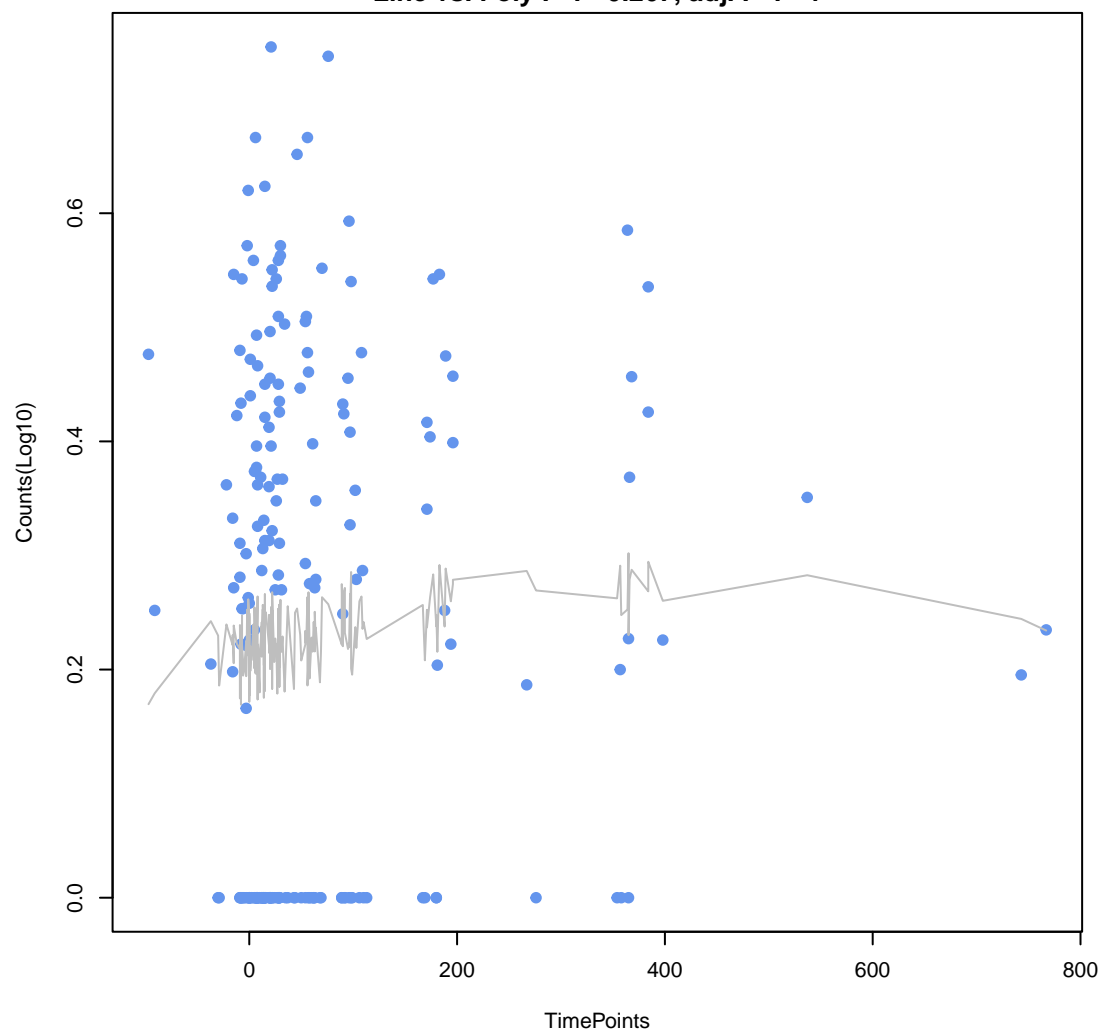
**gadW**

ANOVA  $P=0.0606$ , adj. ANOVA- $P=0.432$   
Line vs. Poly F- $P=0.239$ , adj. F- $P=0.948$



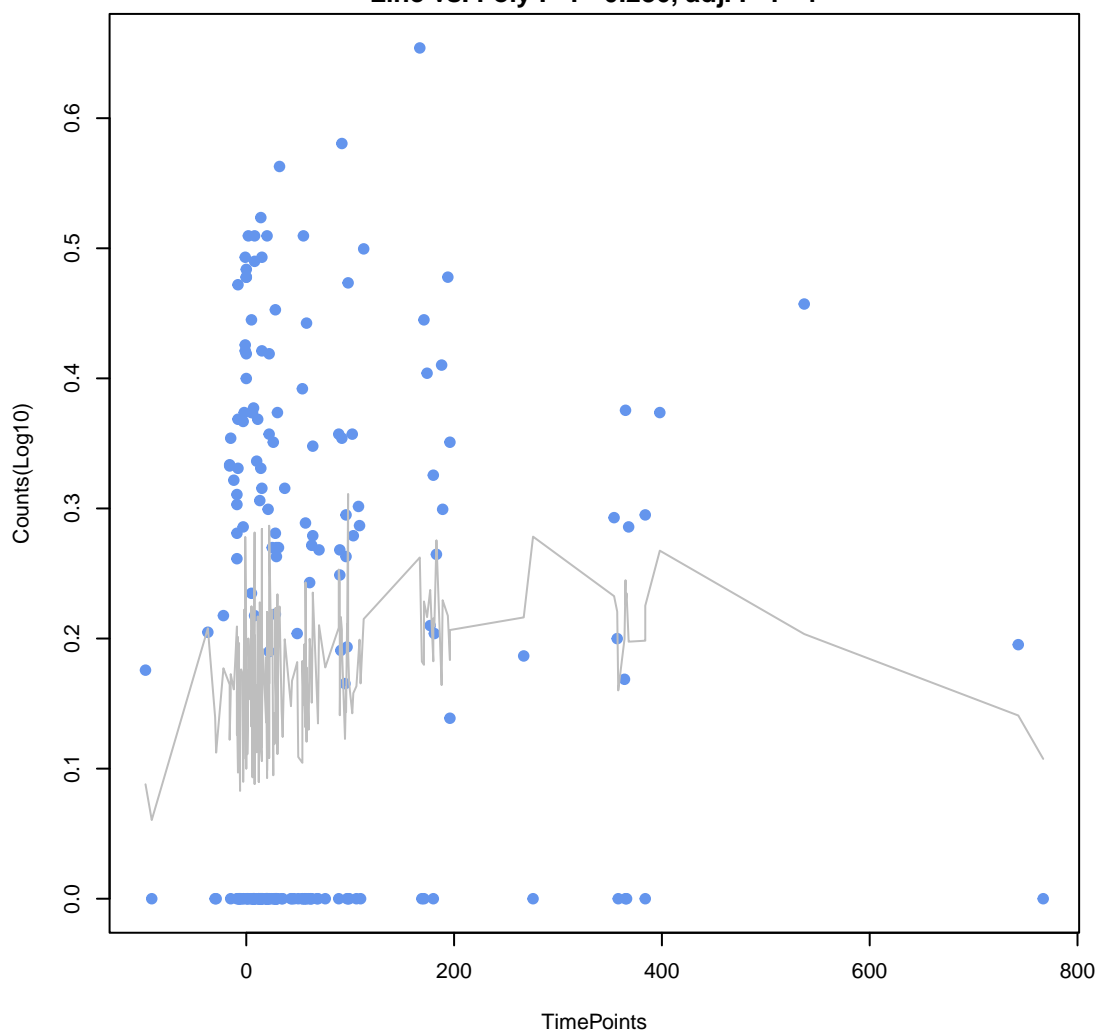
**cpxA**

ANOVA  $P=0.575$ , adj. ANOVA- $P=0.822$   
Line vs. Poly F- $P=0.267$ , adj. F- $P=1$



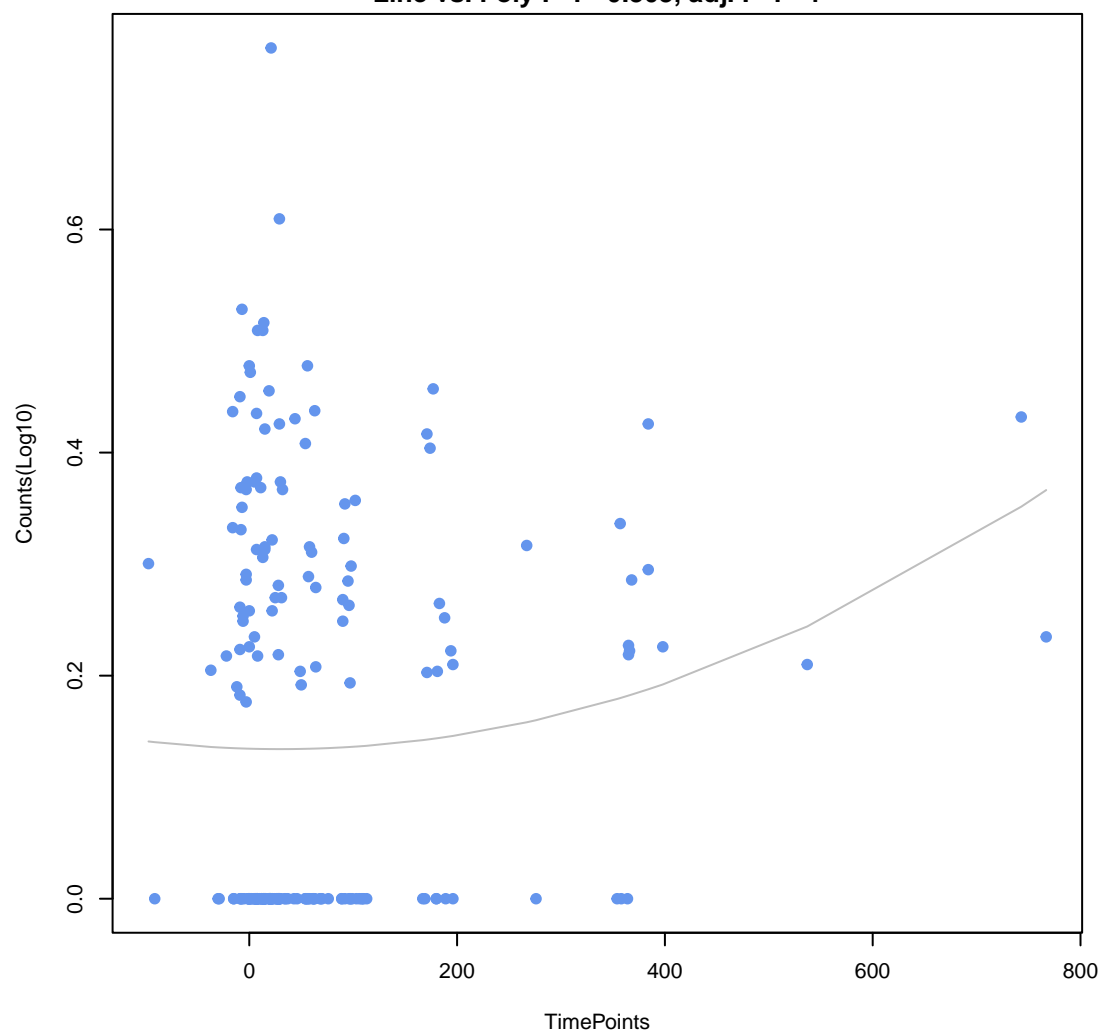
**mdtG**

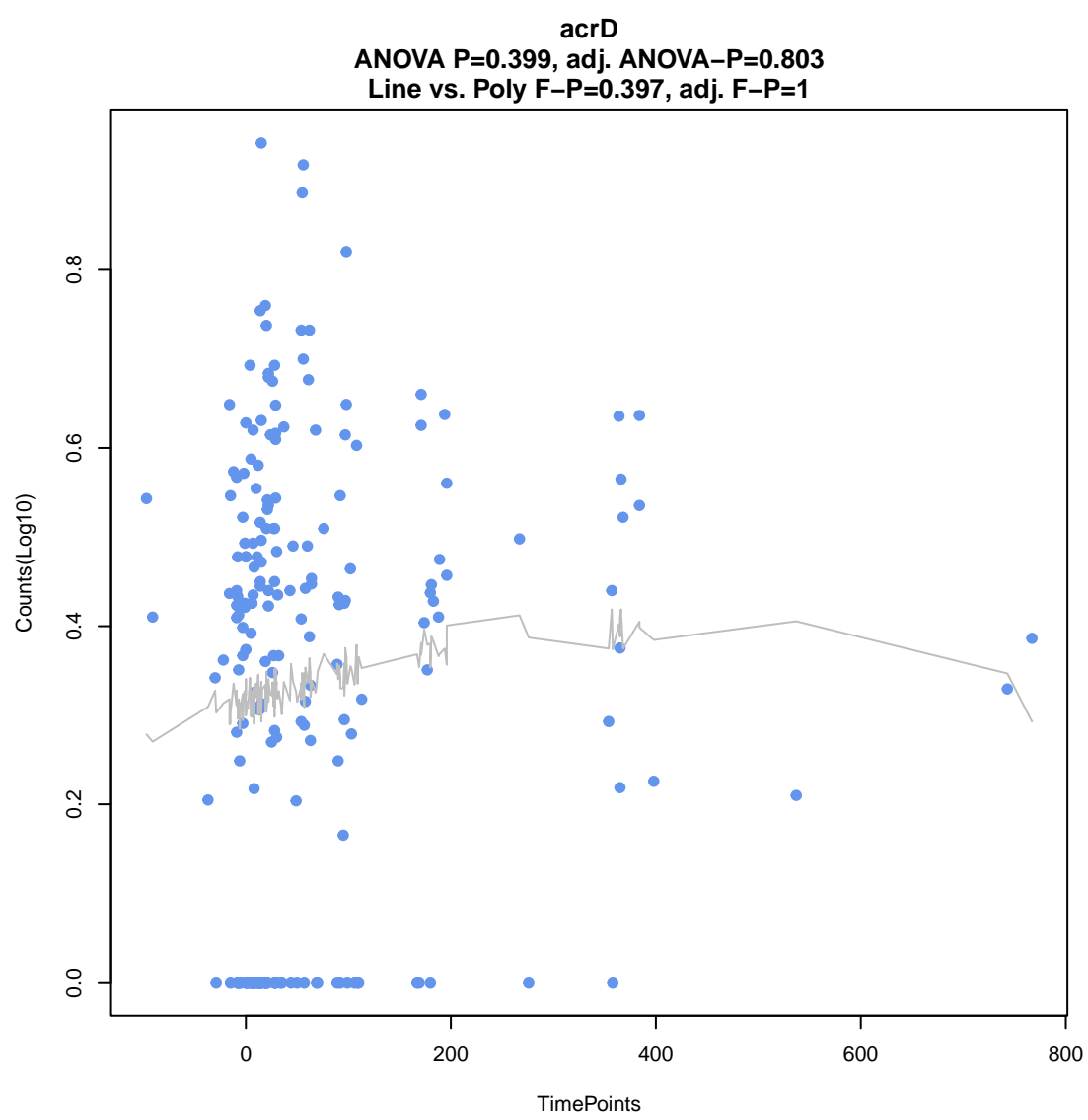
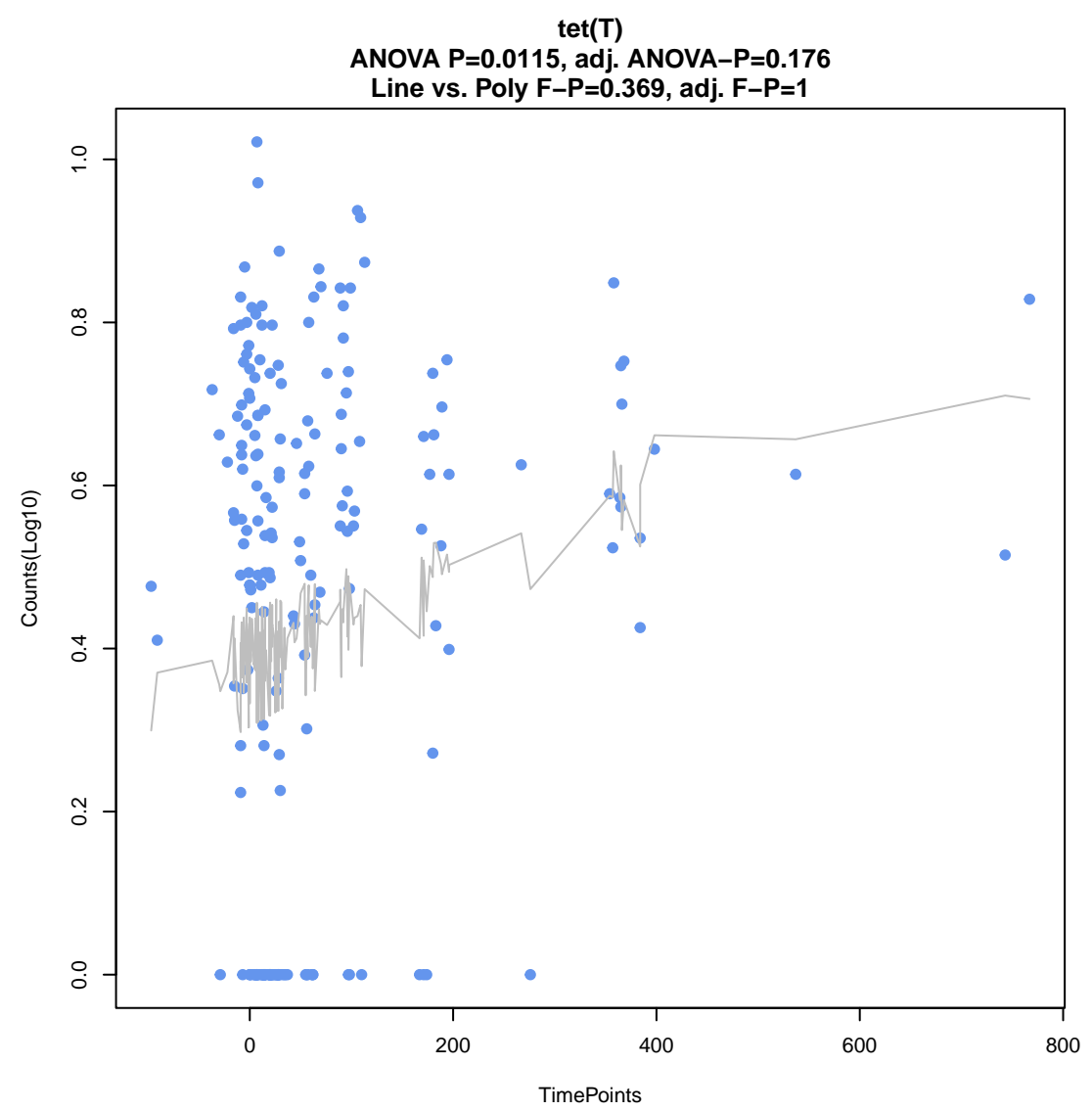
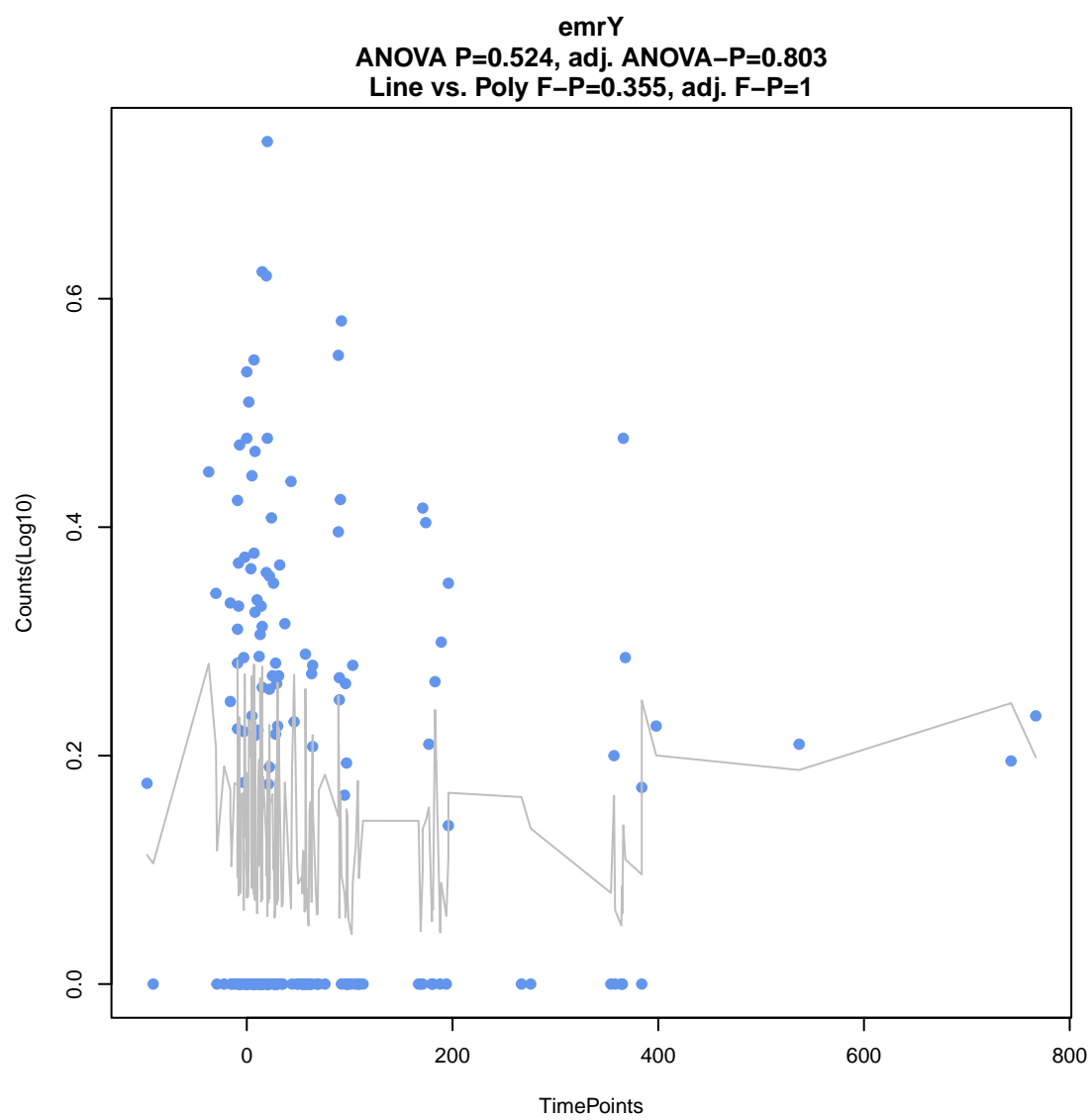
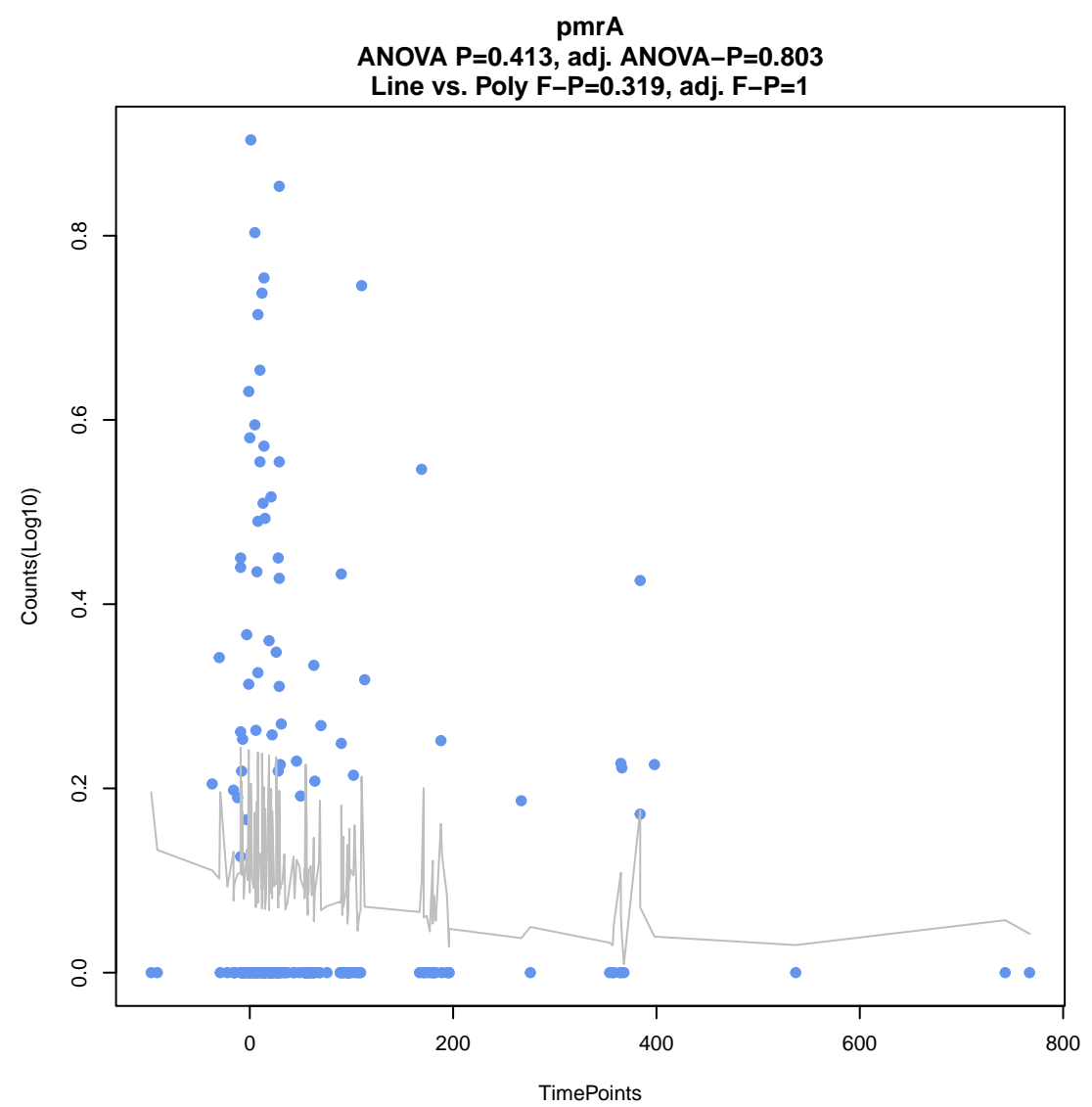
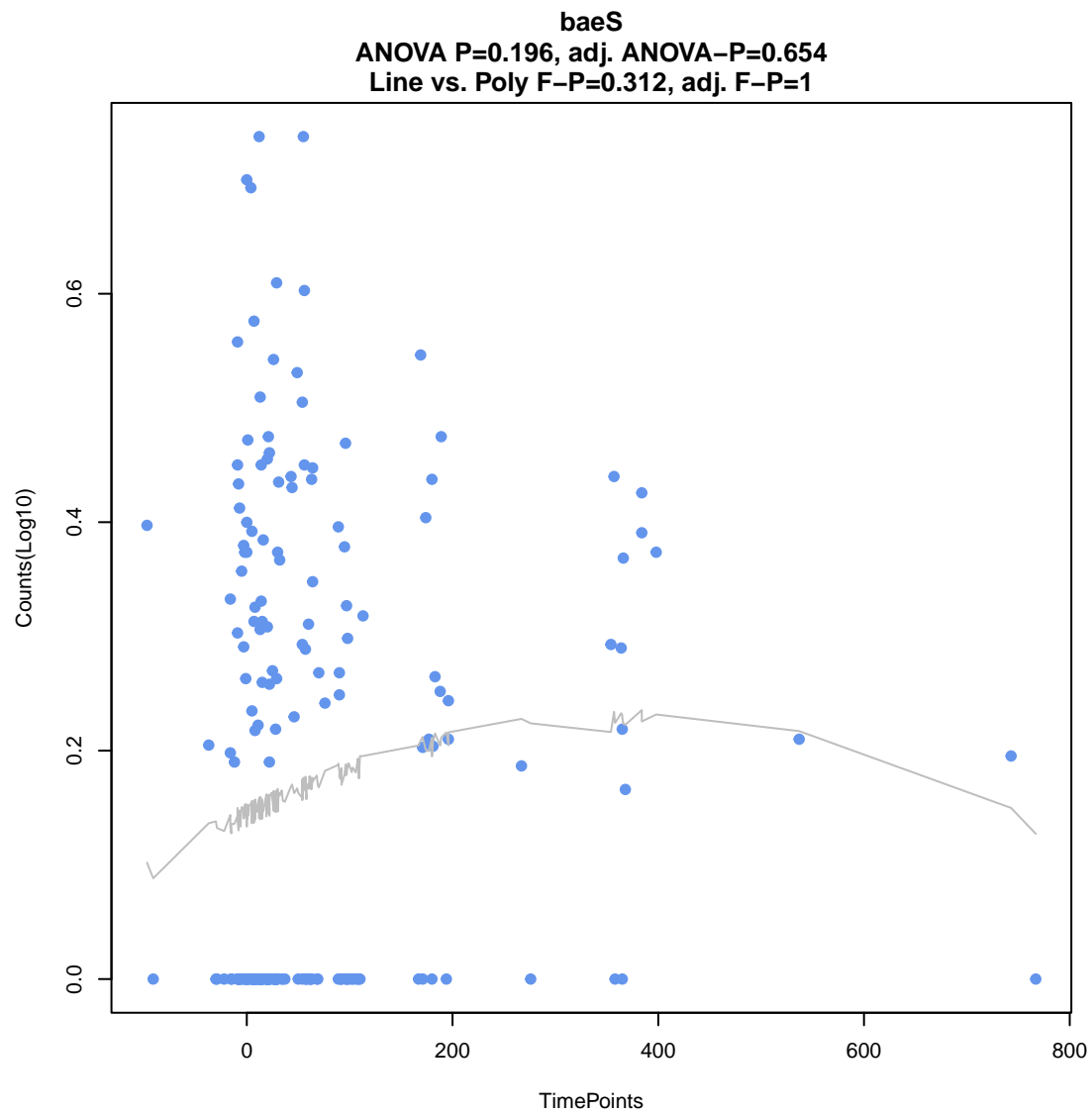
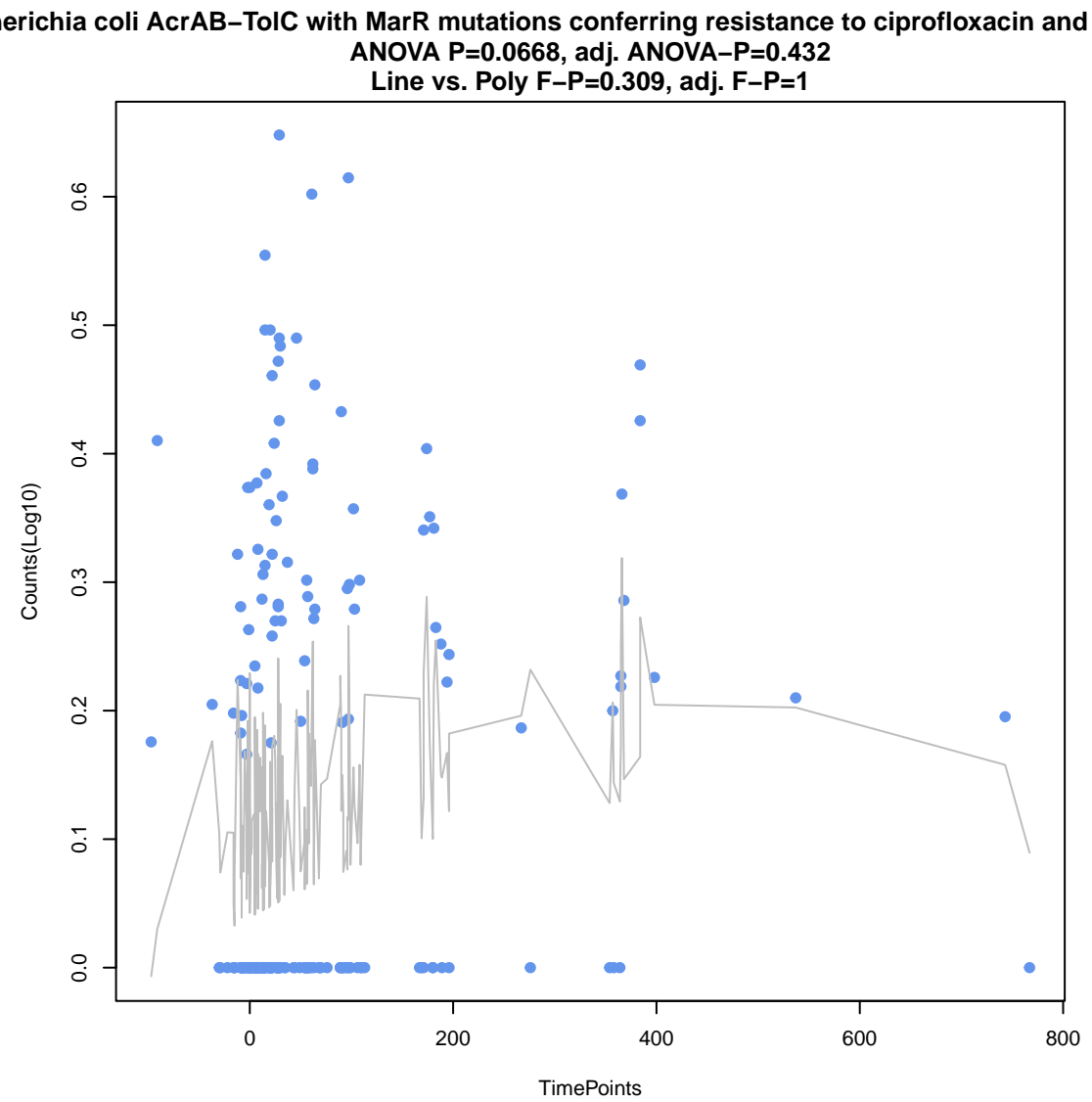
ANOVA  $P=0.23$ , adj. ANOVA- $P=0.684$   
Line vs. Poly F- $P=0.286$ , adj. F- $P=1$



**mdtH**

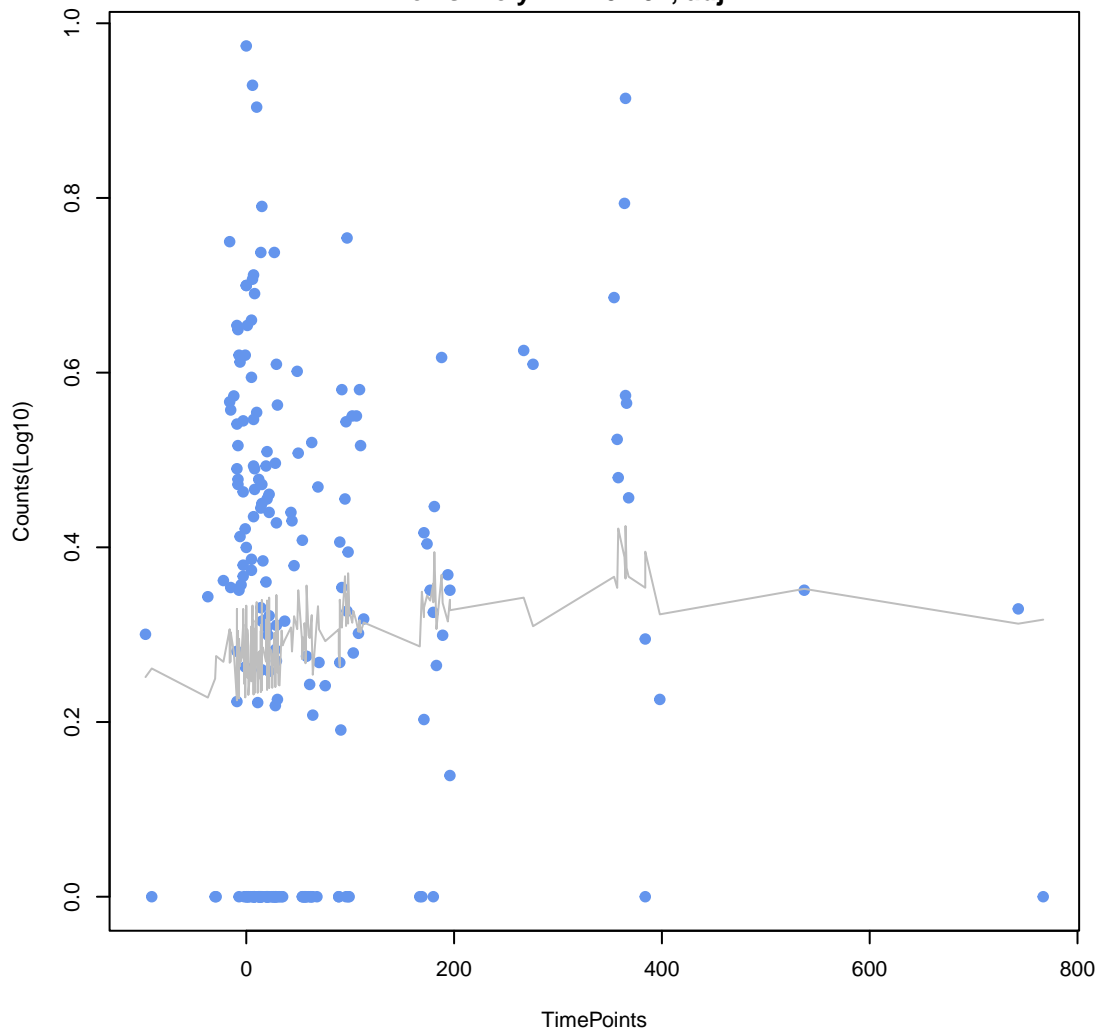
ANOVA  $P=0.115$ , adj. ANOVA- $P=0.513$   
Line vs. Poly F- $P=0.303$ , adj. F- $P=1$



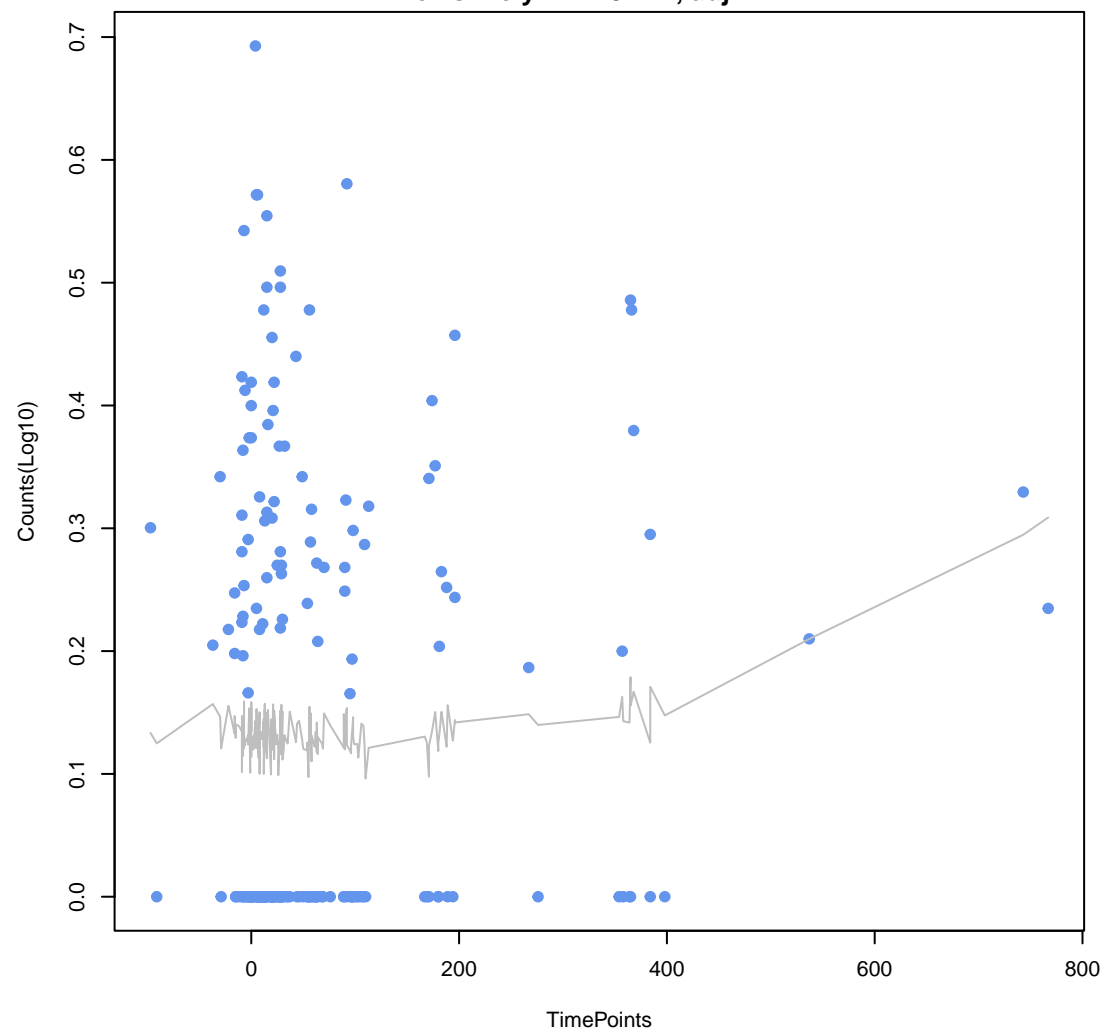


**BlaB-38**

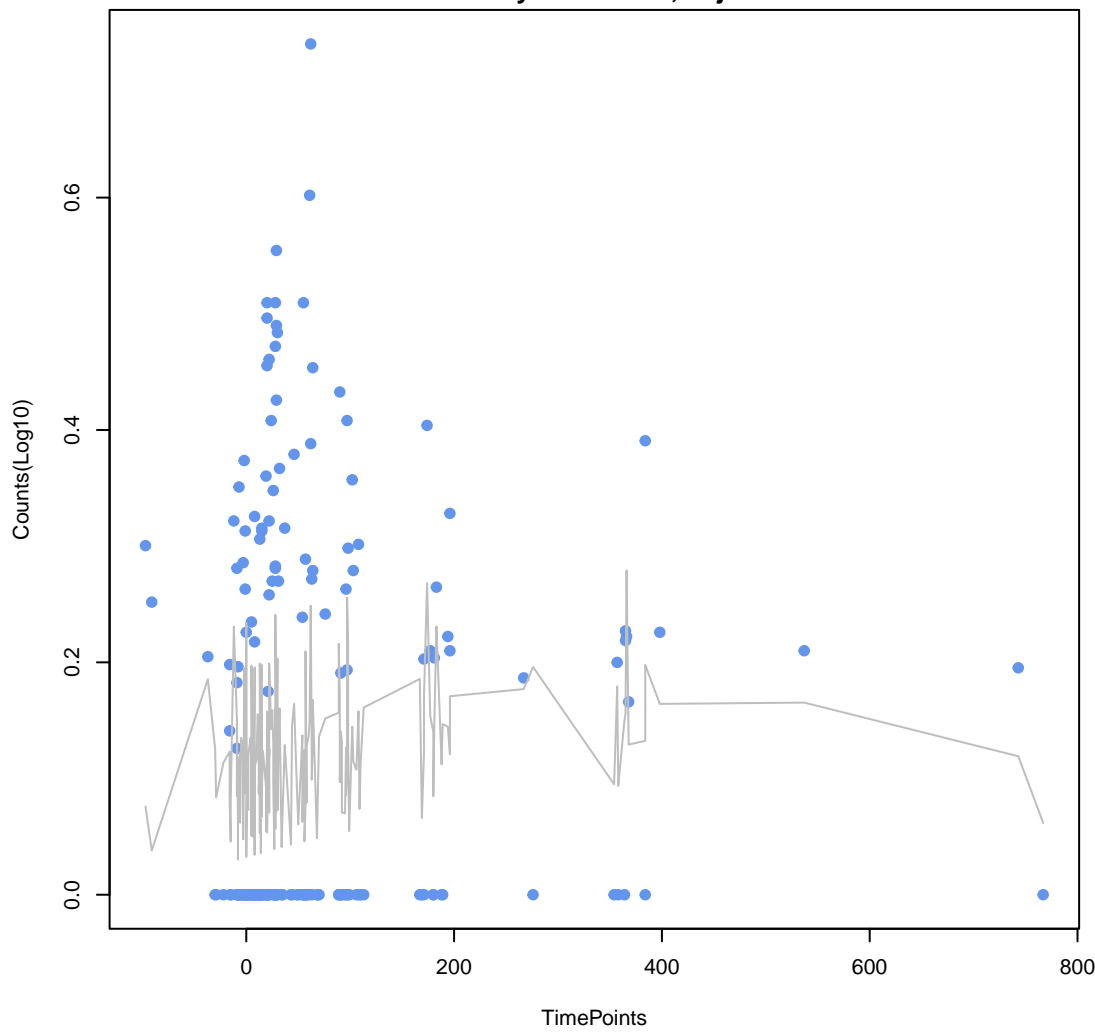
ANOVA P=0.326, adj. ANOVA-P=0.777  
Line vs. Poly F-P=0.401, adj. F-P=1

**eptA**

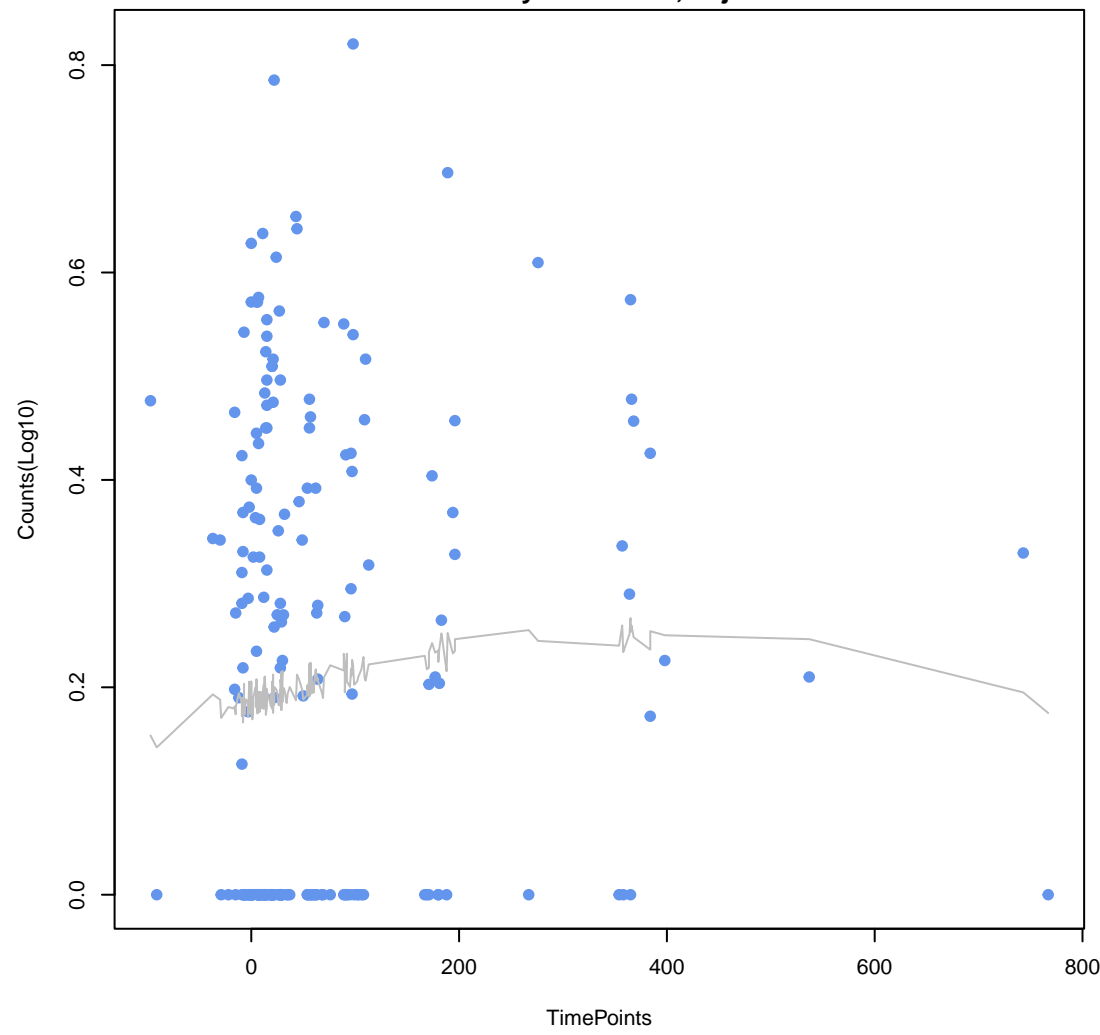
ANOVA P=0.388, adj. ANOVA-P=0.803  
Line vs. Poly F-P=0.411, adj. F-P=1

**marA**

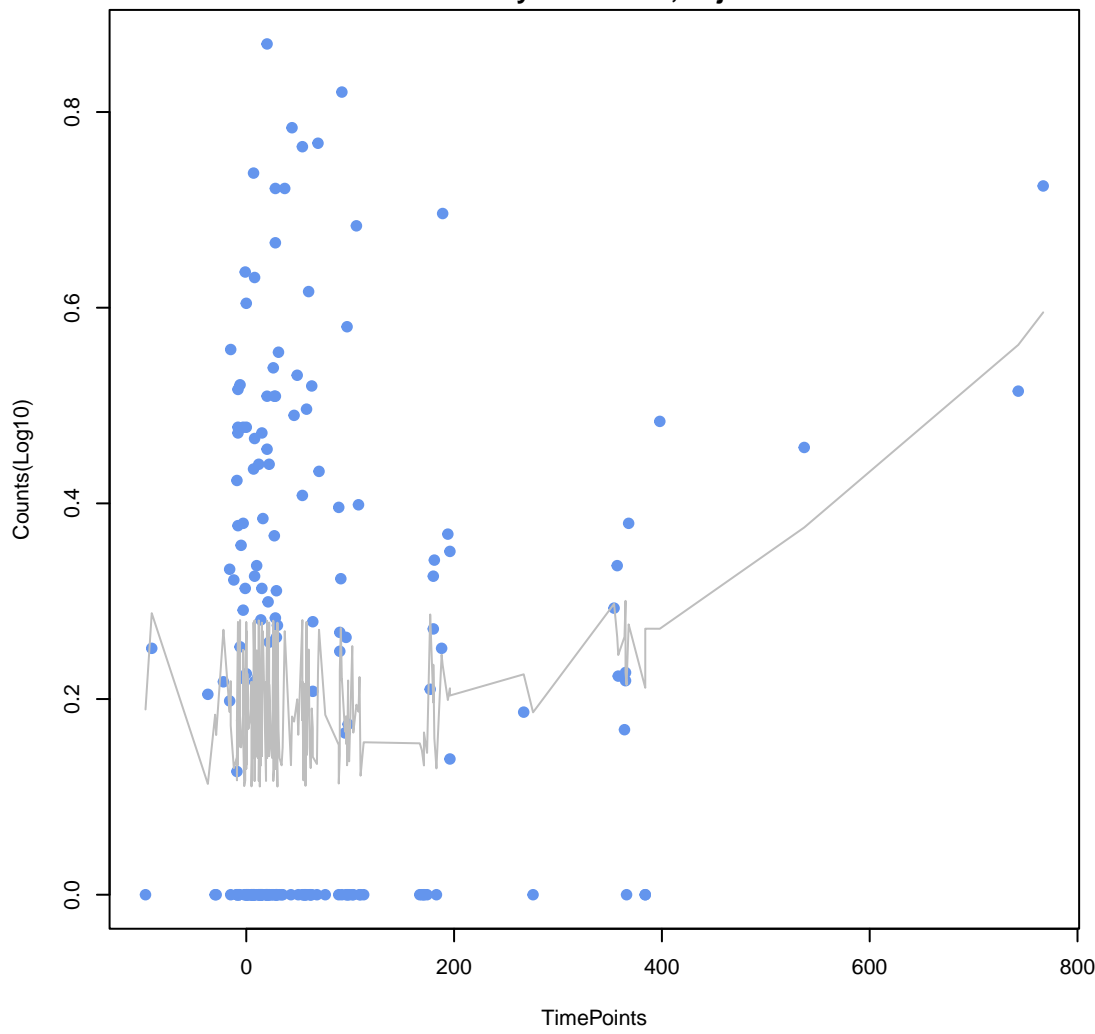
ANOVA P=0.432, adj. ANOVA-P=0.803  
Line vs. Poly F-P=0.415, adj. F-P=1

**mdtO**

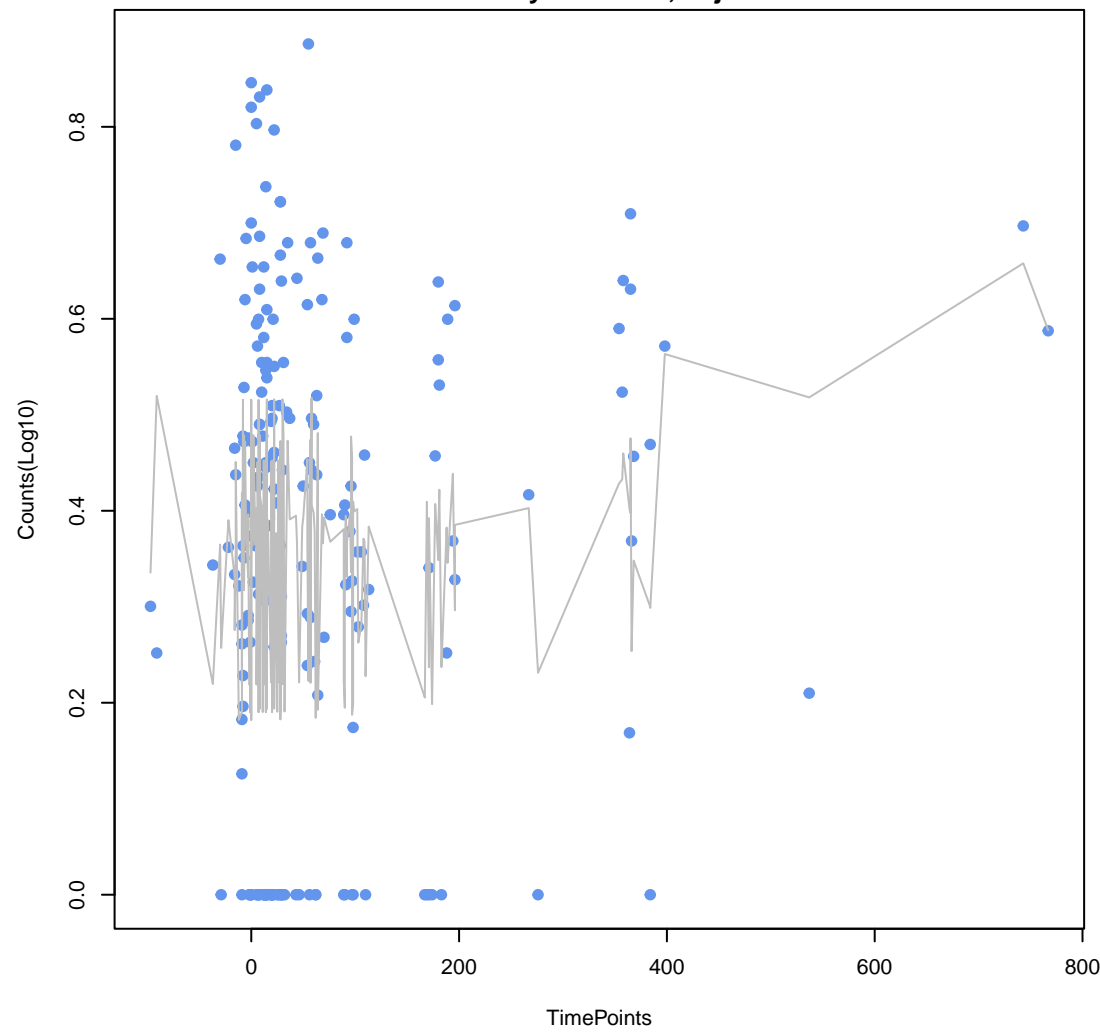
ANOVA P=0.478, adj. ANOVA-P=0.803  
Line vs. Poly F-P=0.429, adj. F-P=1

**tet(44)**

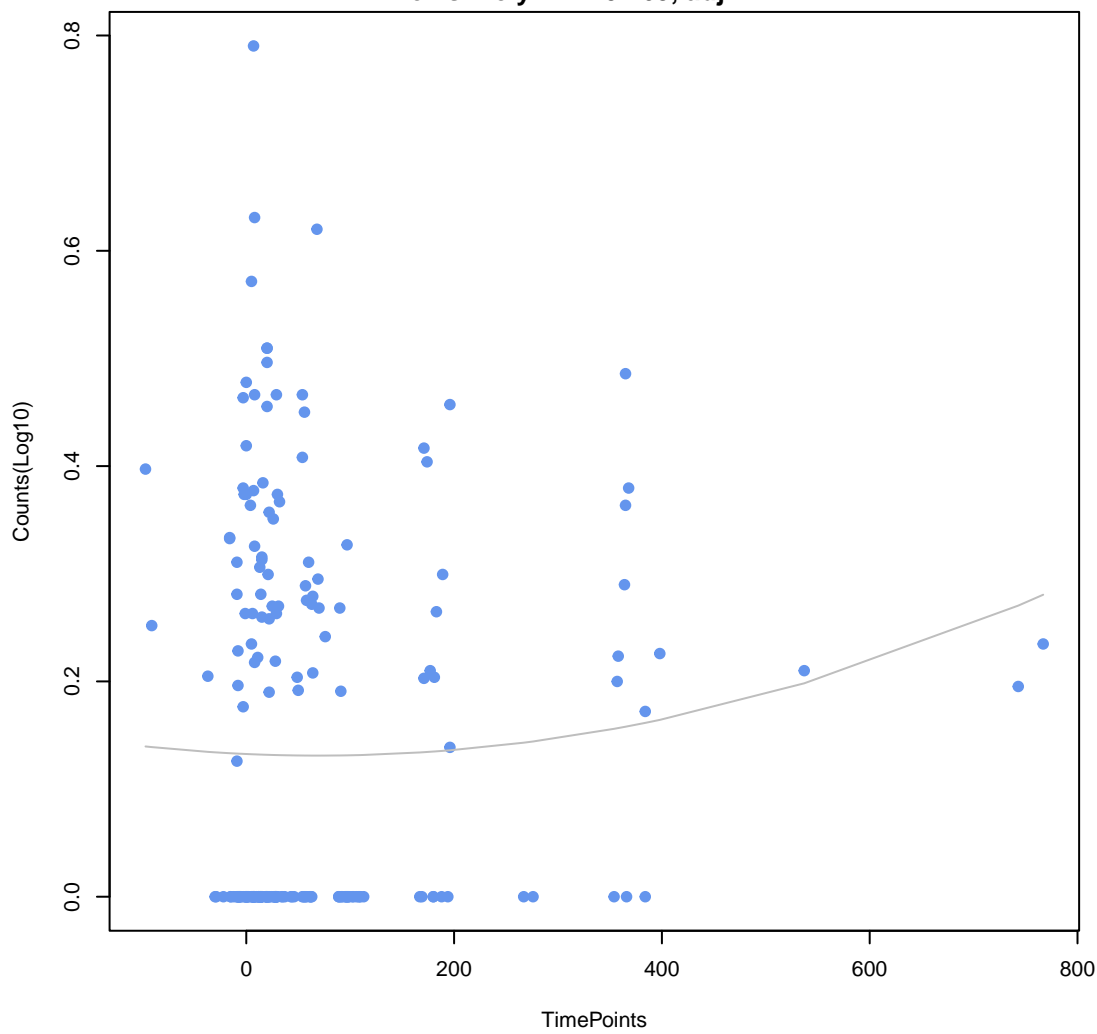
ANOVA P=0.0228, adj. ANOVA-P=0.244  
Line vs. Poly F-P=0.432, adj. F-P=1

**tet(32)**

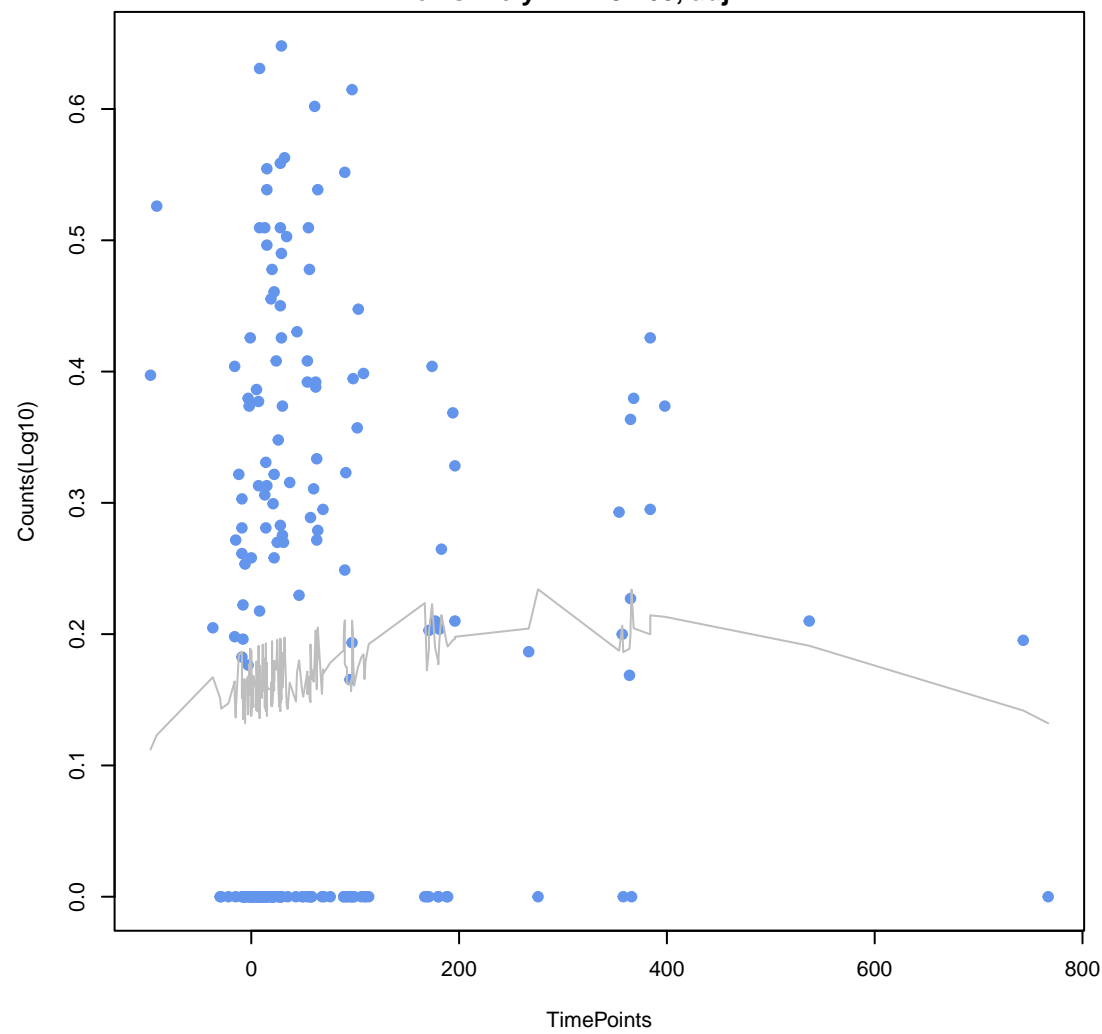
ANOVA P=0.0938, adj. ANOVA-P=0.502  
Line vs. Poly F-P=0.44, adj. F-P=1



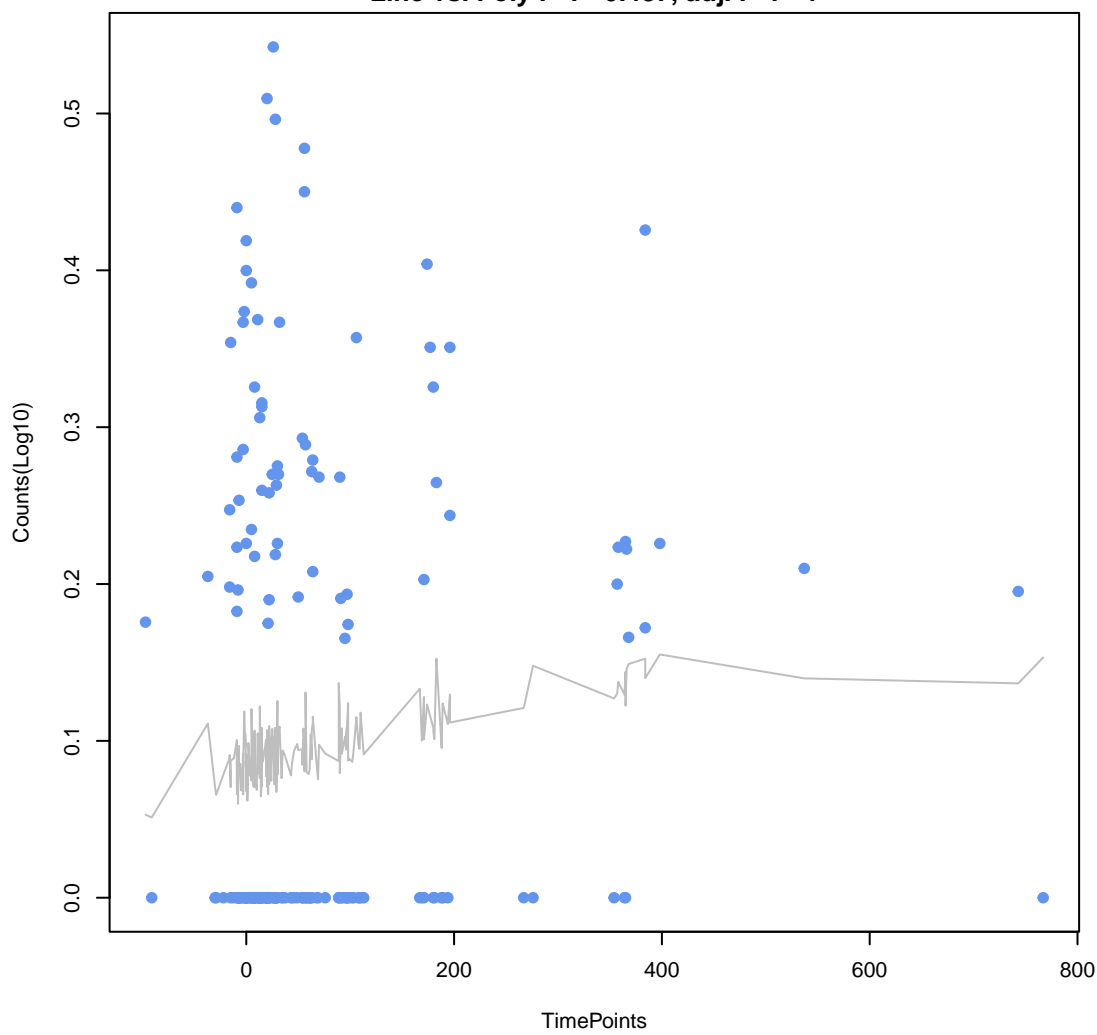
**mdtN**  
ANOVA P=0.442, adj. ANOVA-P=0.803  
Line vs. Poly F-P=0.465, adj. F-P=1



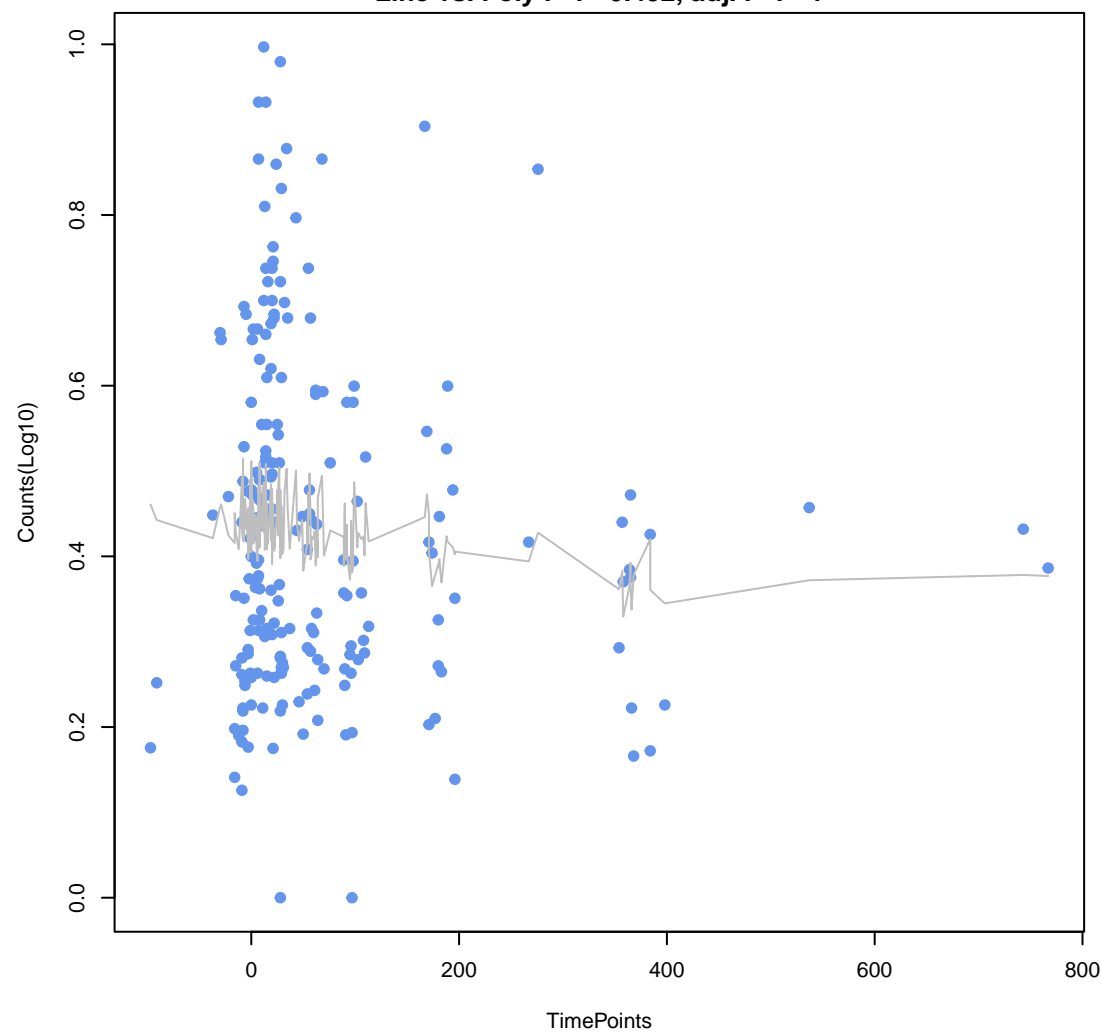
**PmrF**  
ANOVA P=0.541, adj. ANOVA-P=0.812  
Line vs. Poly F-P=0.468, adj. F-P=1



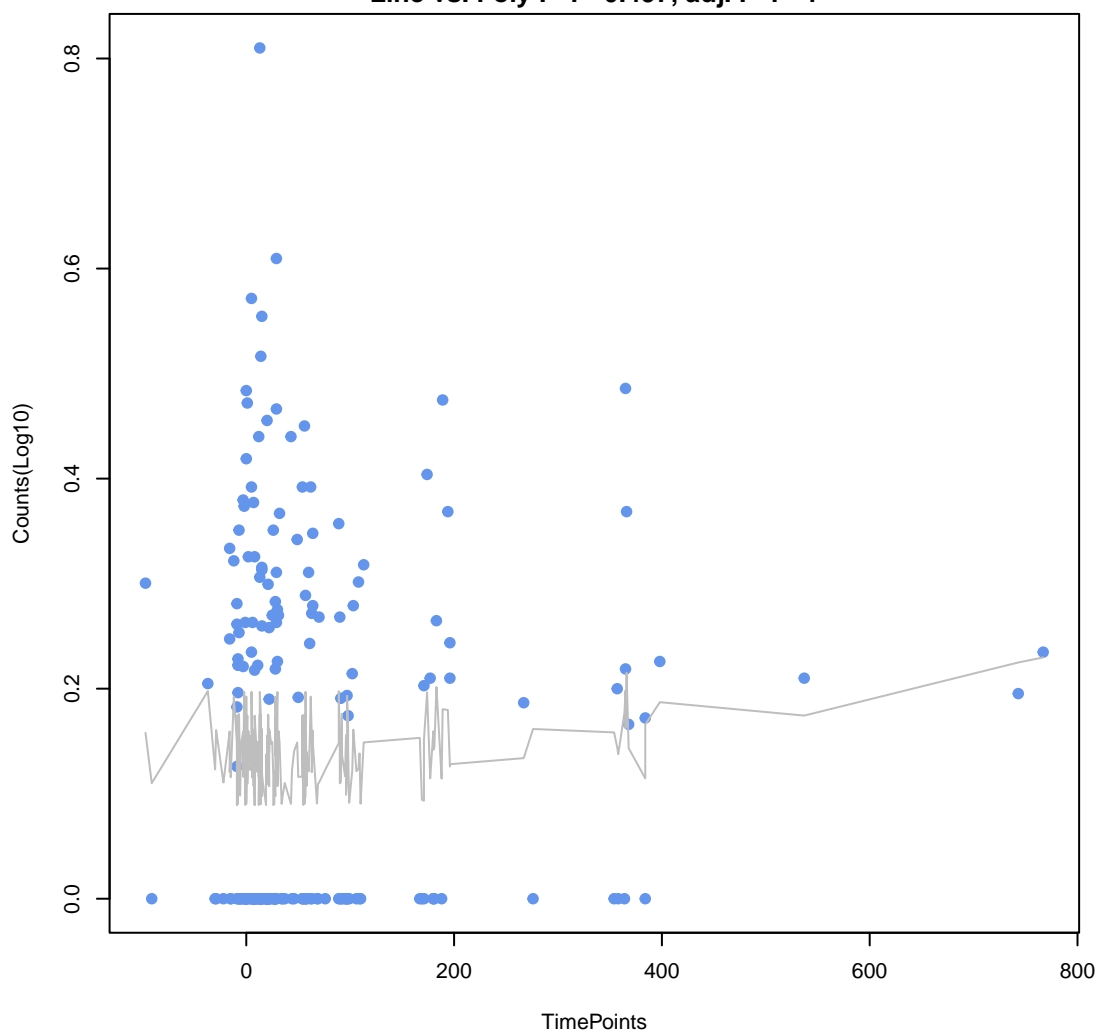
**AcrS**  
ANOVA P=0.276, adj. ANOVA-P=0.758  
Line vs. Poly F-P=0.487, adj. F-P=1



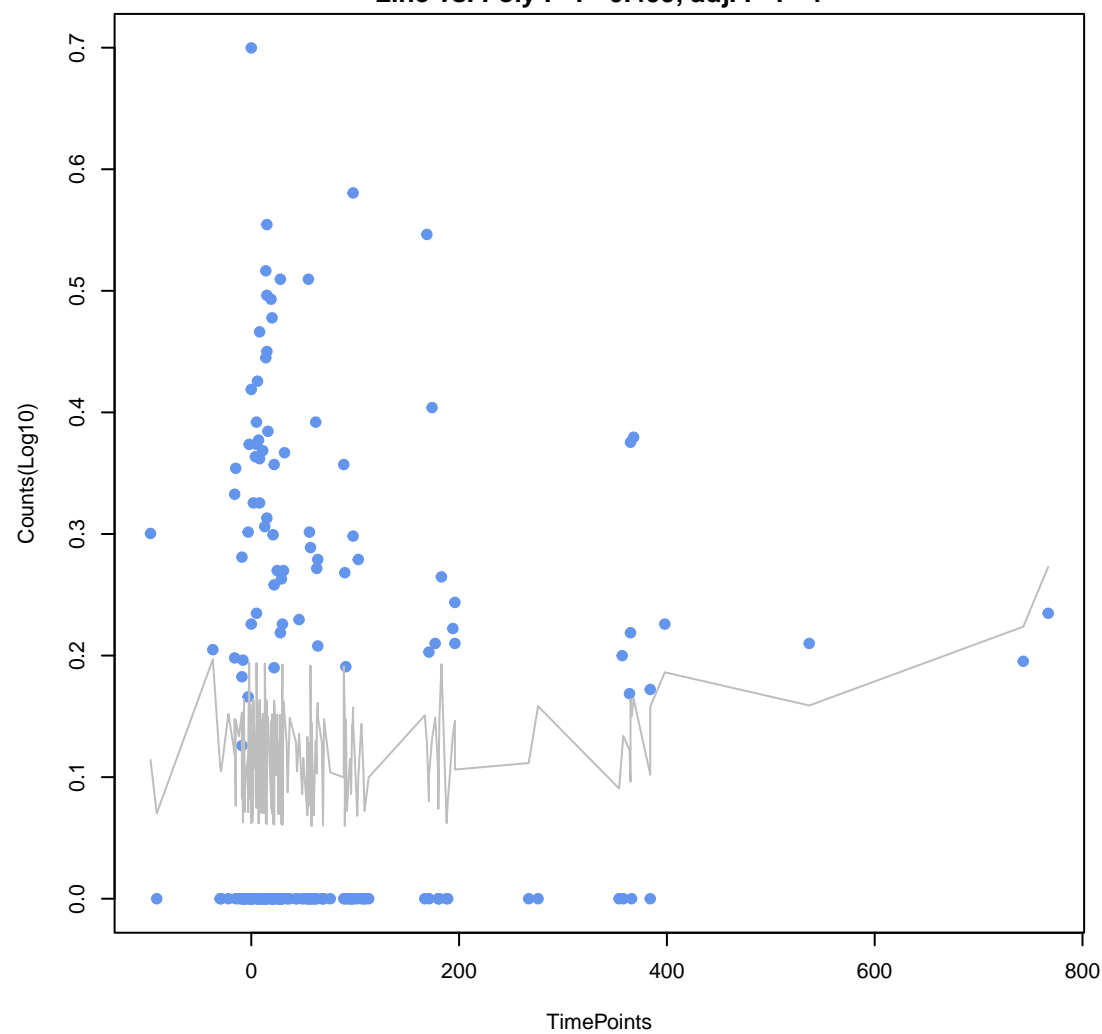
**tet(O)**  
ANOVA P=0.335, adj. ANOVA-P=0.777  
Line vs. Poly F-P=0.492, adj. F-P=1



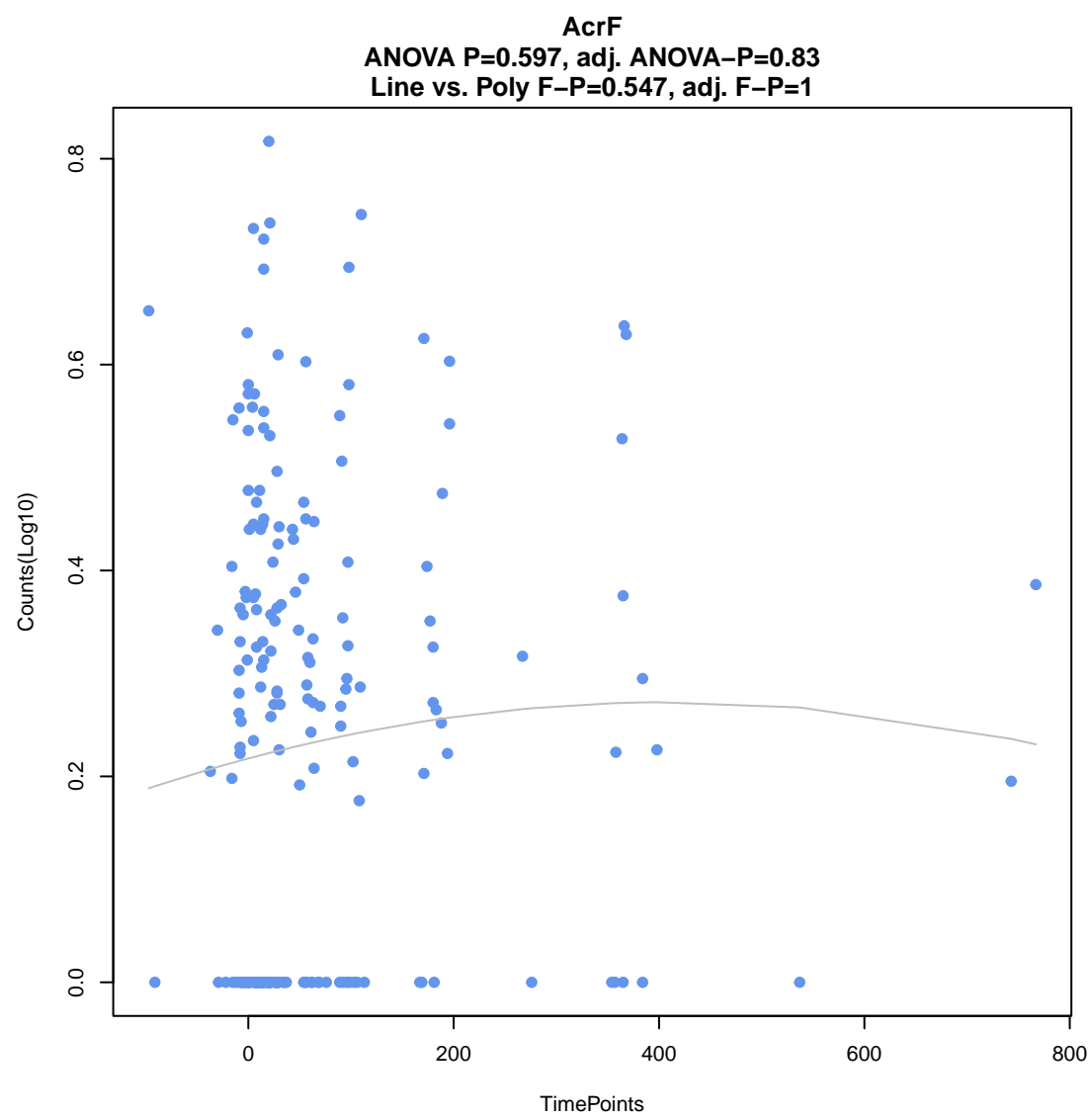
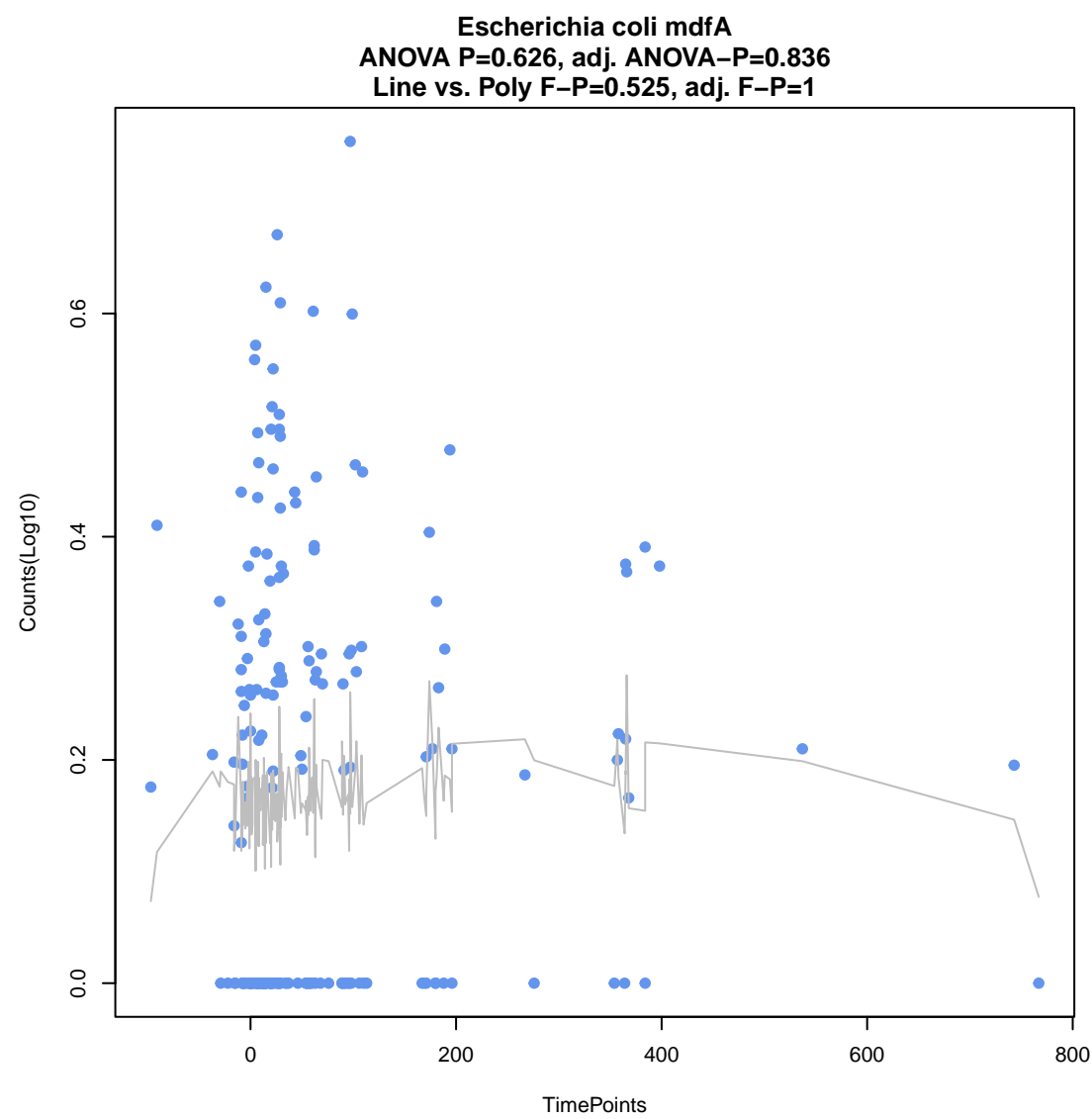
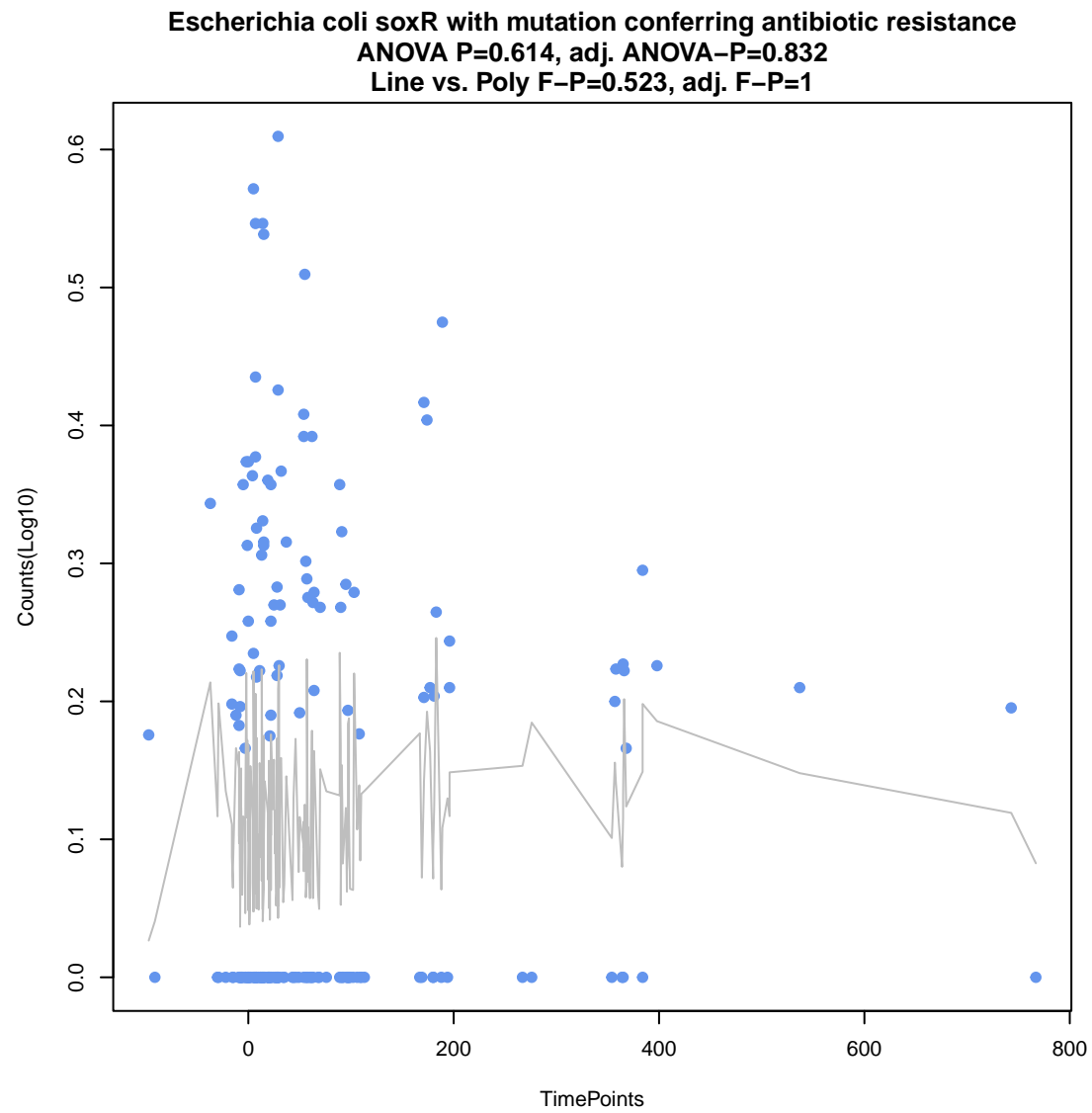
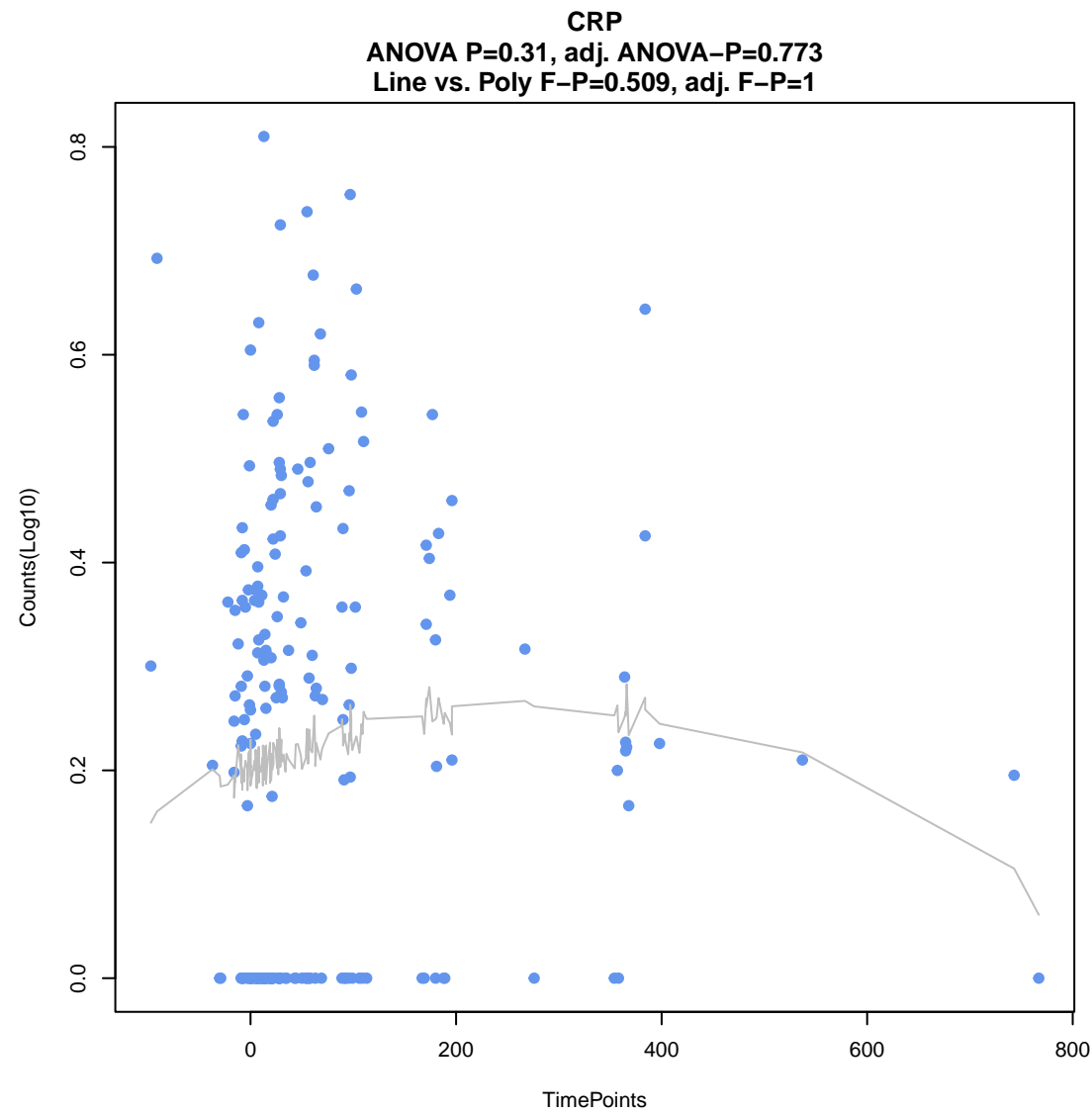
**Escherichia coli acrA**  
ANOVA P=0.597, adj. ANOVA-P=0.83  
Line vs. Poly F-P=0.497, adj. F-P=1



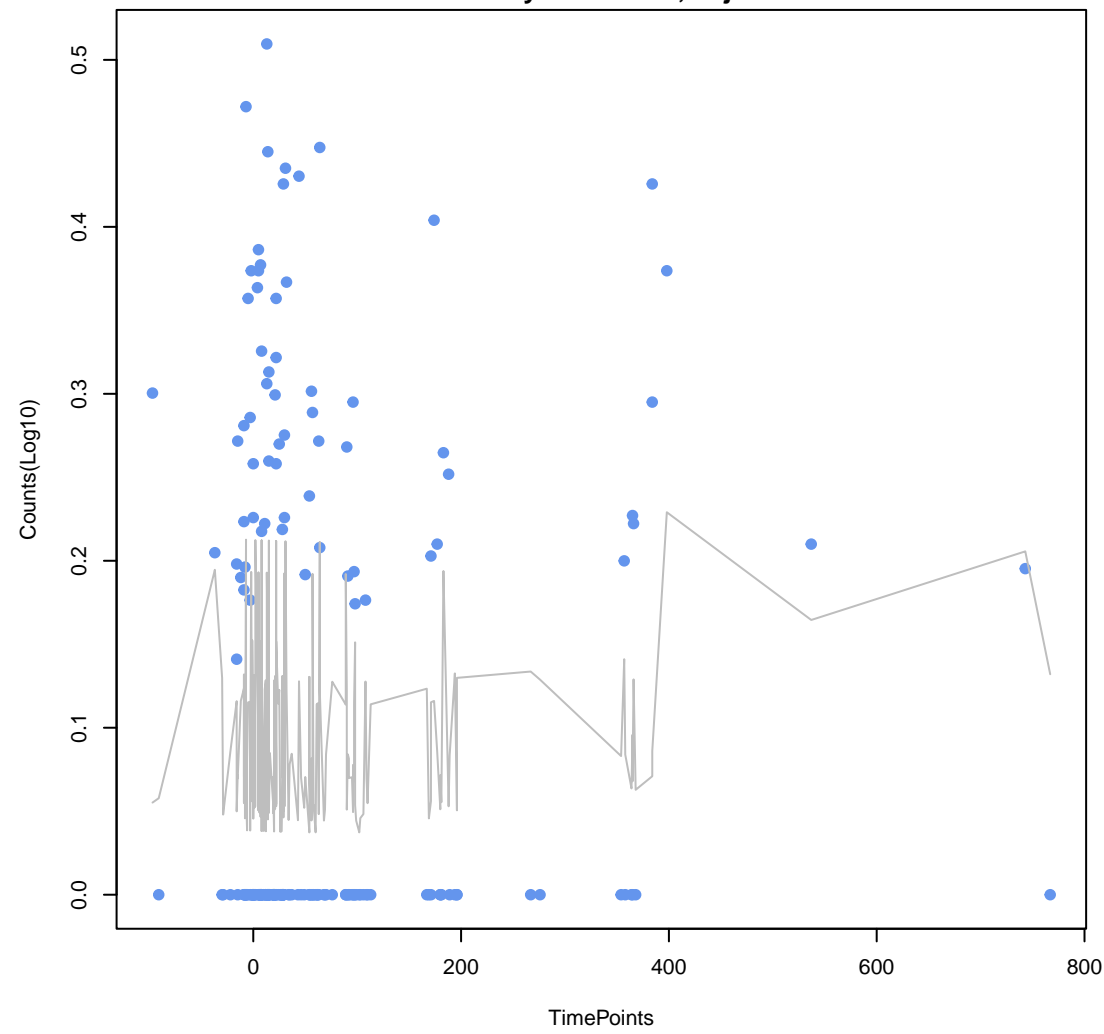
**mdtE**  
ANOVA P=0.525, adj. ANOVA-P=0.803  
Line vs. Poly F-P=0.499, adj. F-P=1



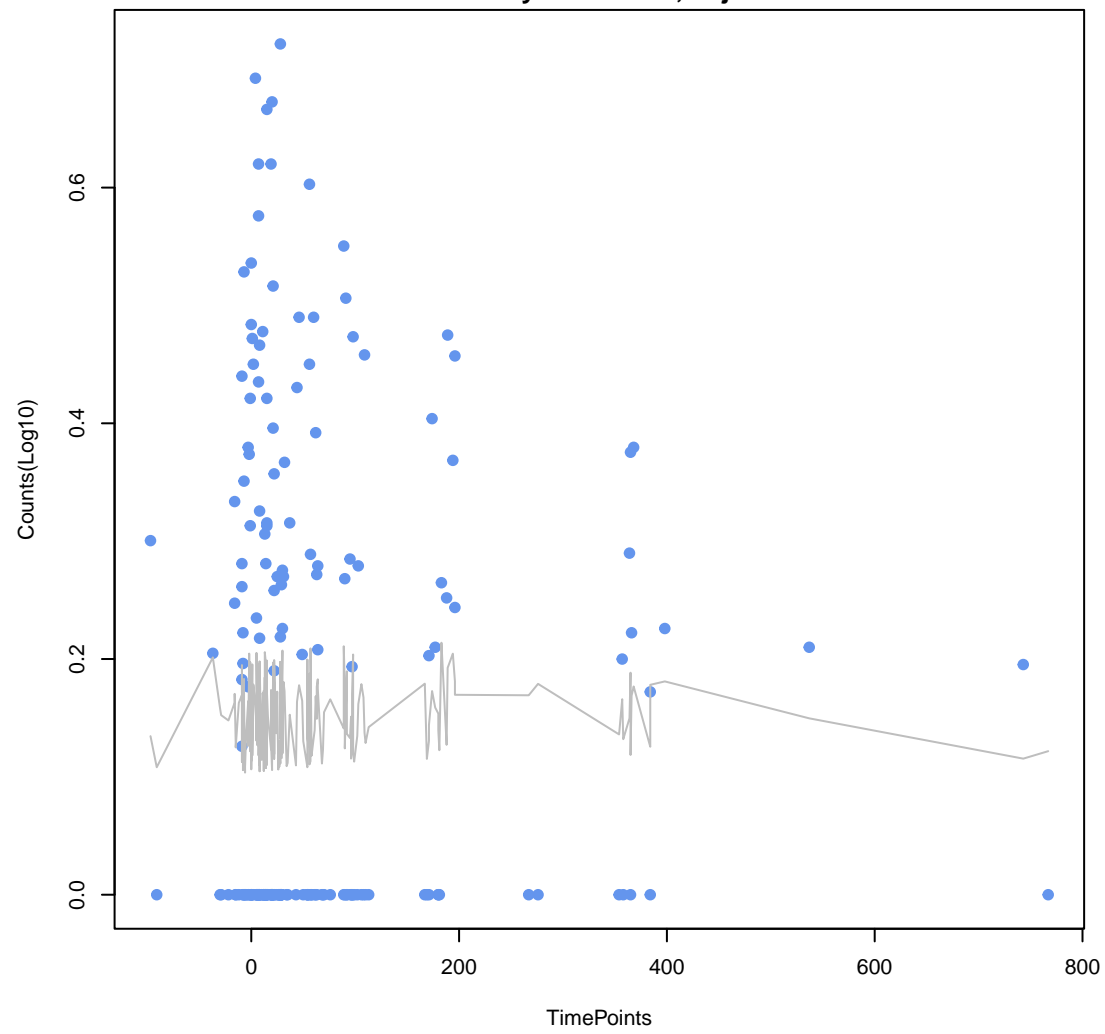


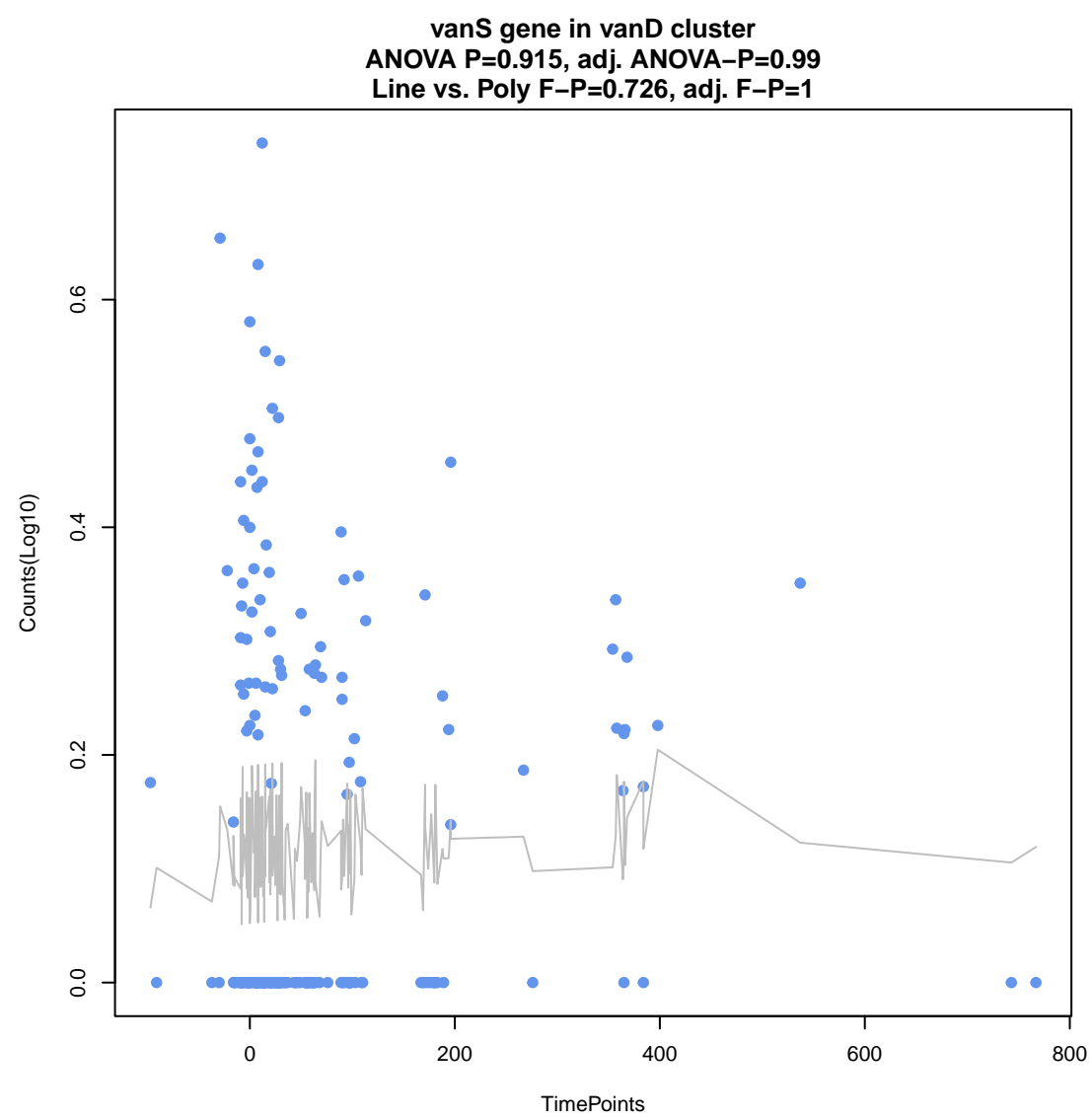
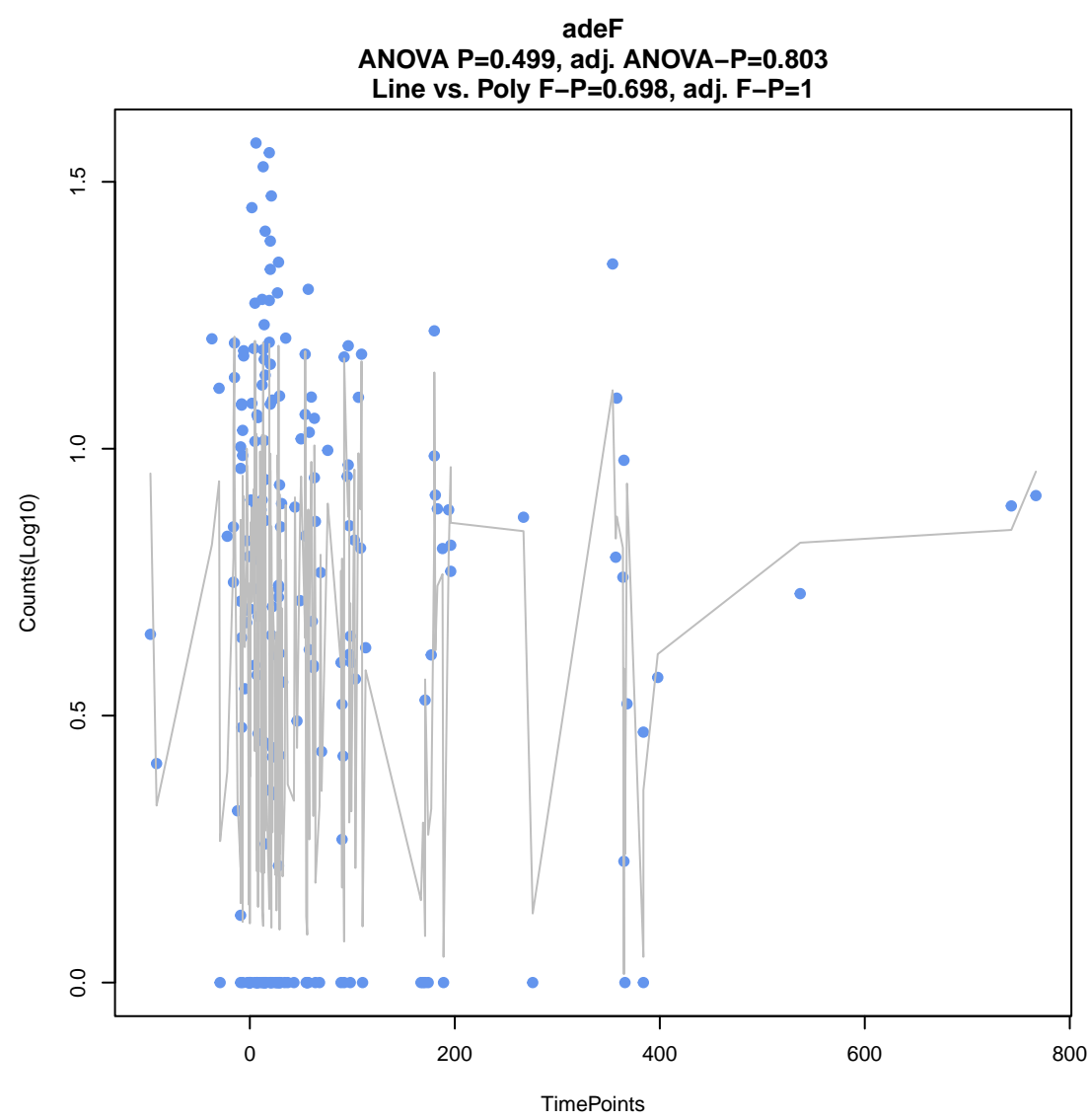
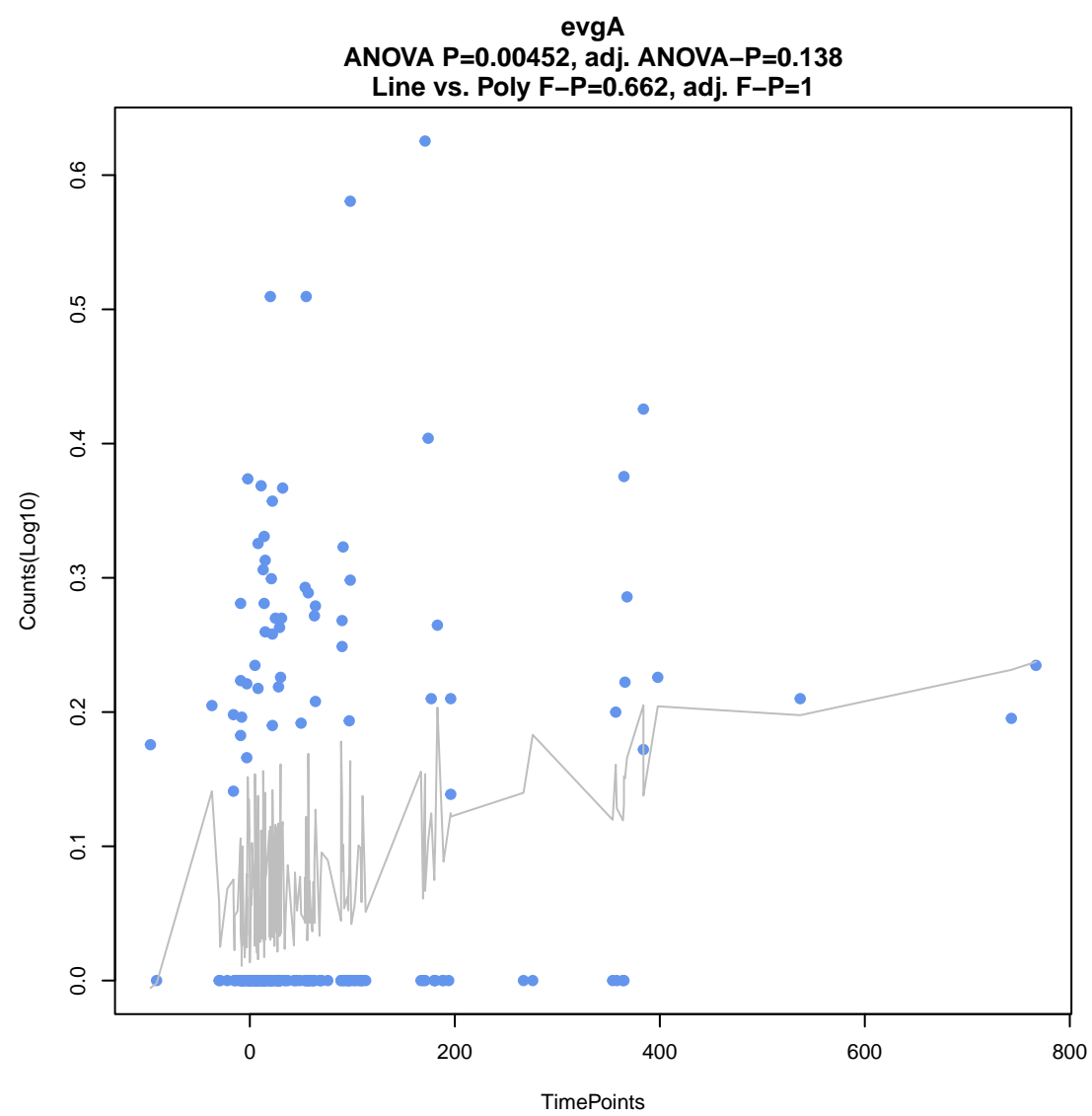
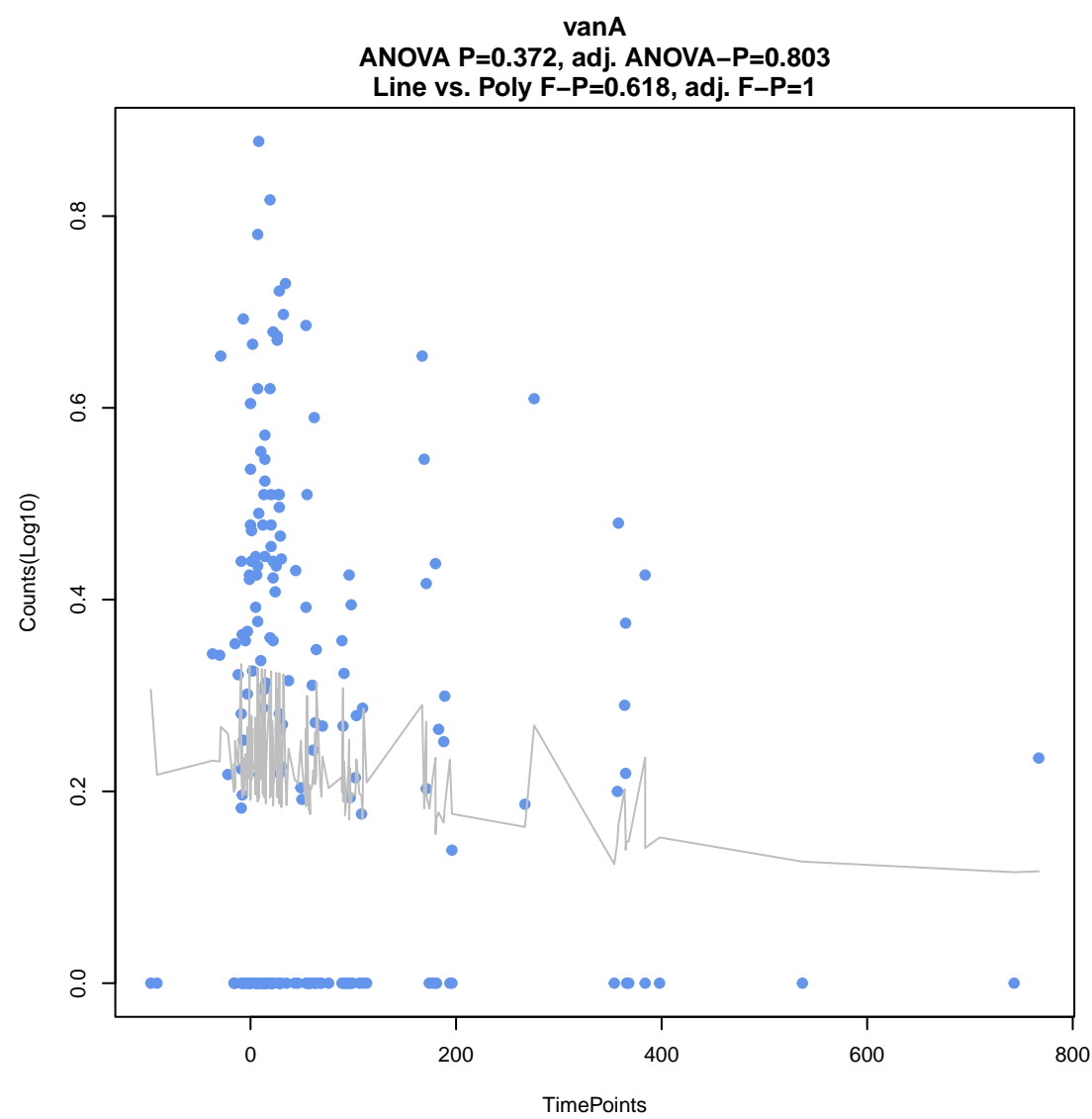
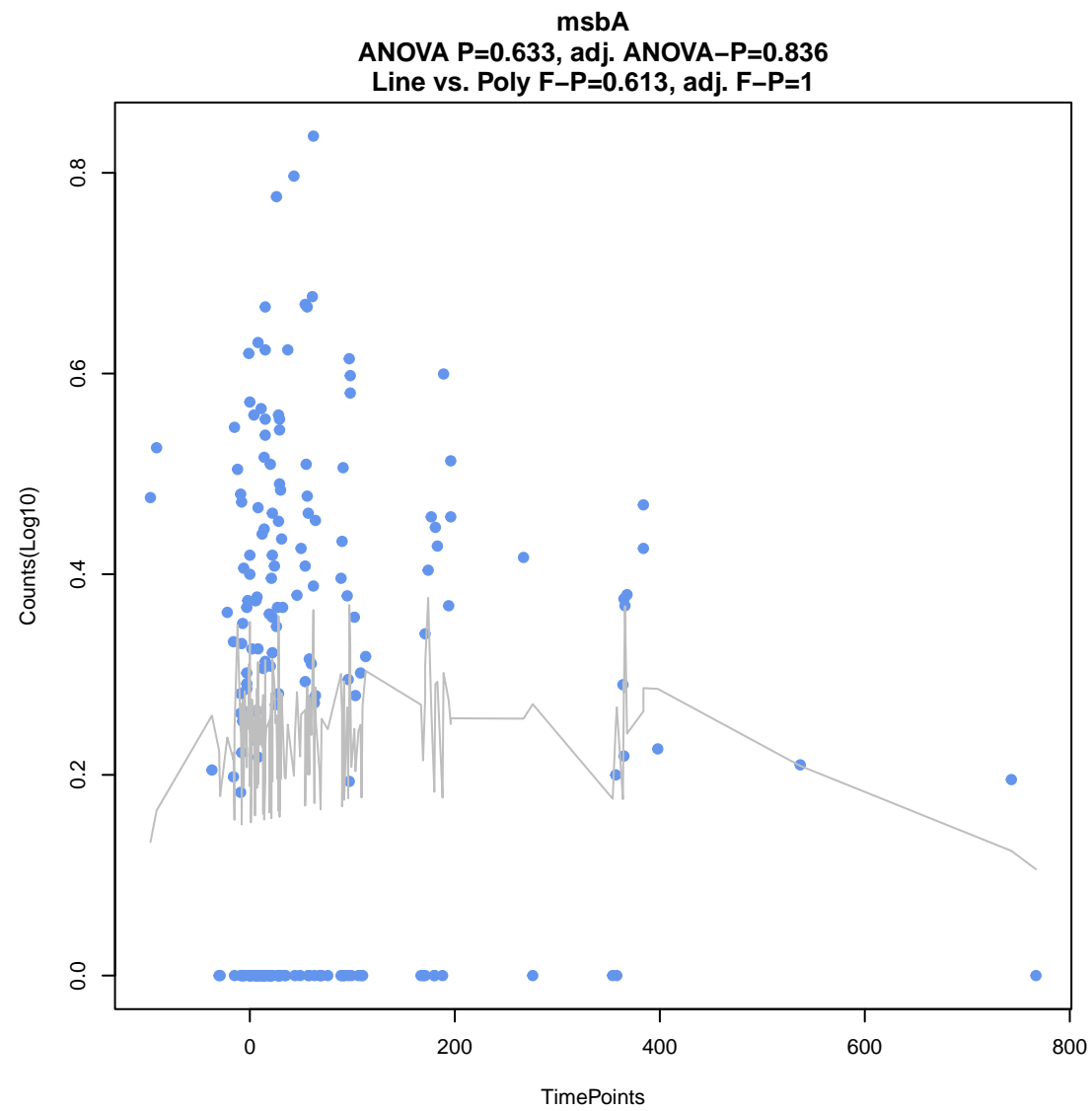
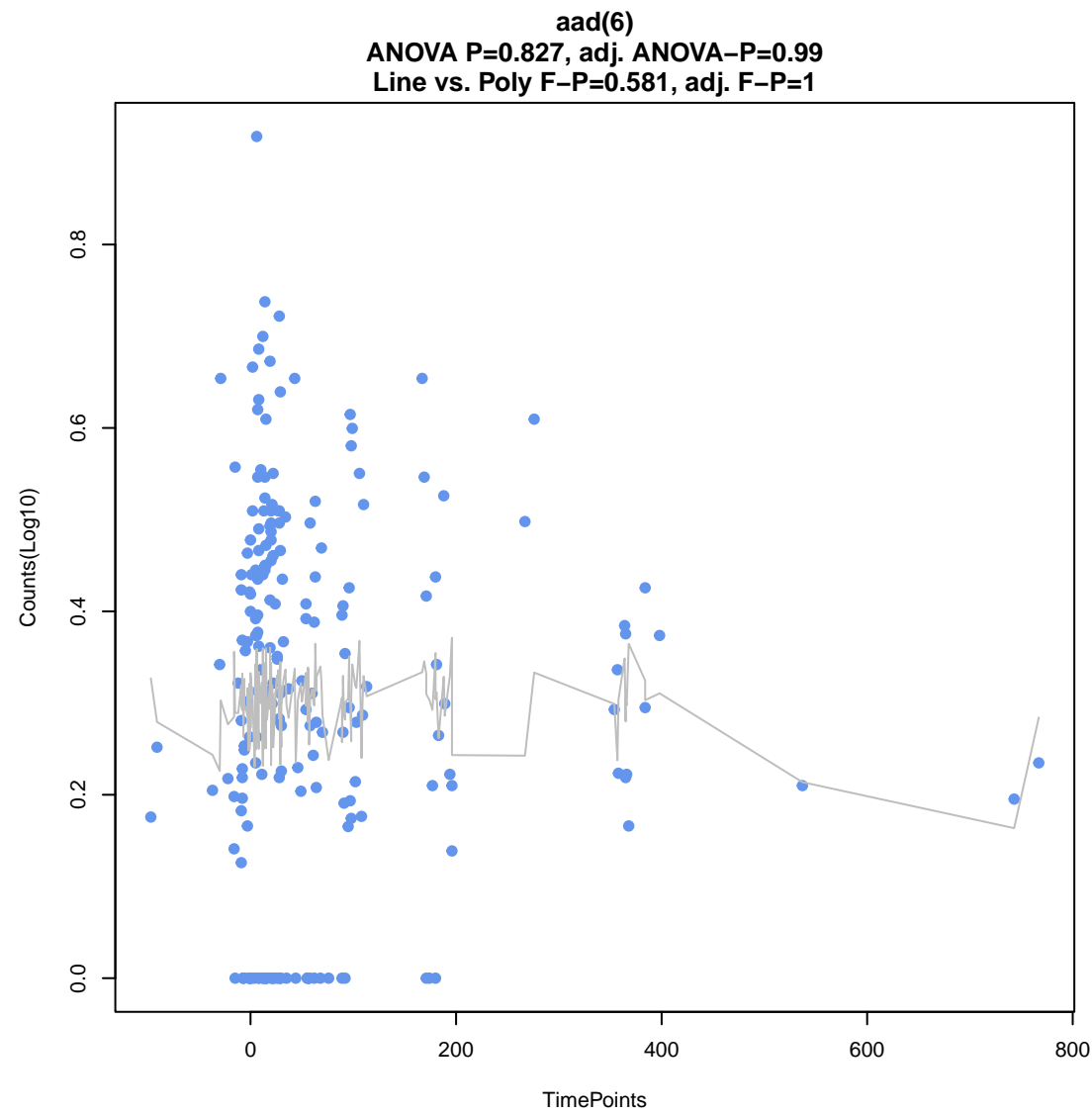


**Escherichia coli AcrAB-TolC with AcrR mutation conferring resistance to ciprofloxacin, tetracycline**  
ANOVA P=0.647, adj. ANOVA-P=0.84  
Line vs. Poly F-P=0.548, adj. F-P=1



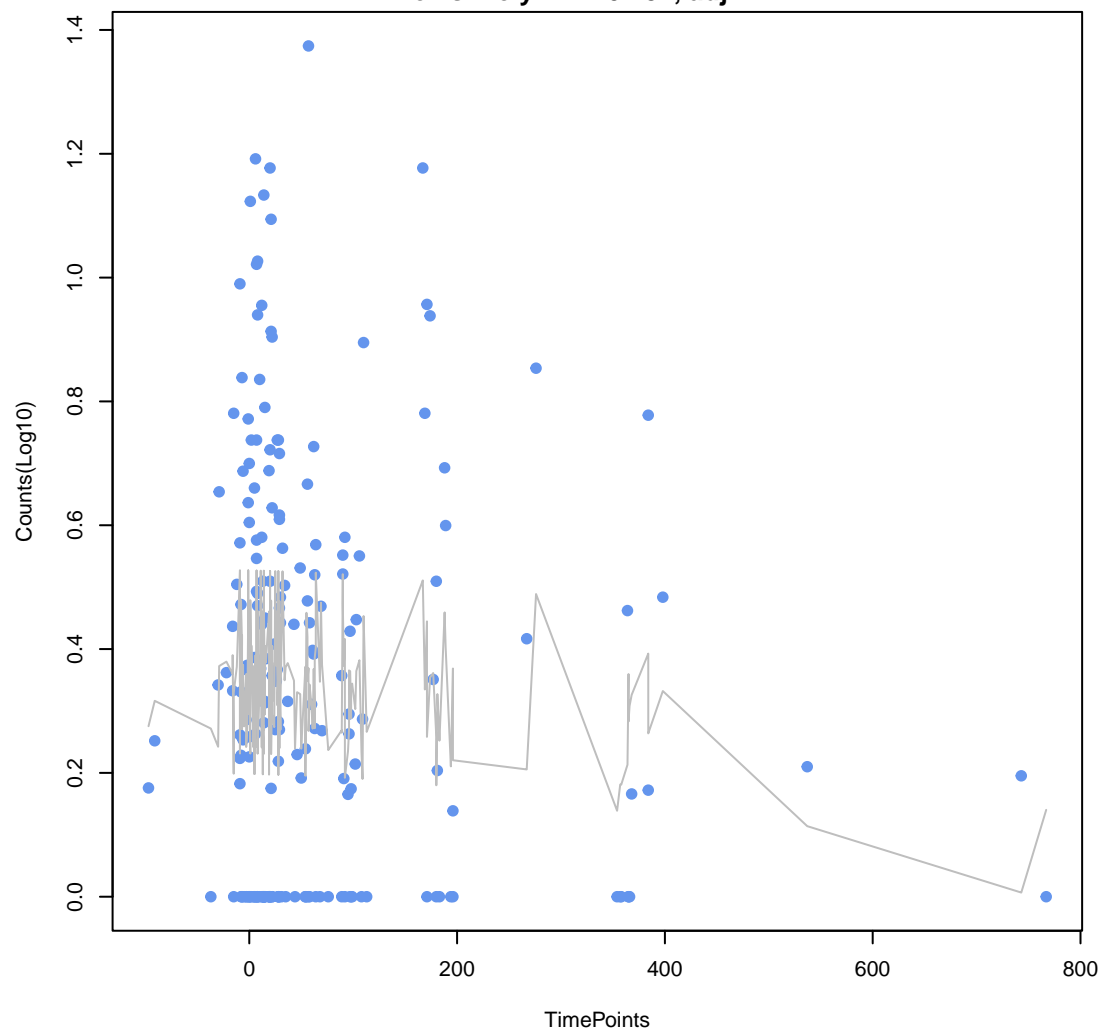
**mdtP**  
ANOVA P=0.909, adj. ANOVA-P=0.99  
Line vs. Poly F-P=0.553, adj. F-P=1





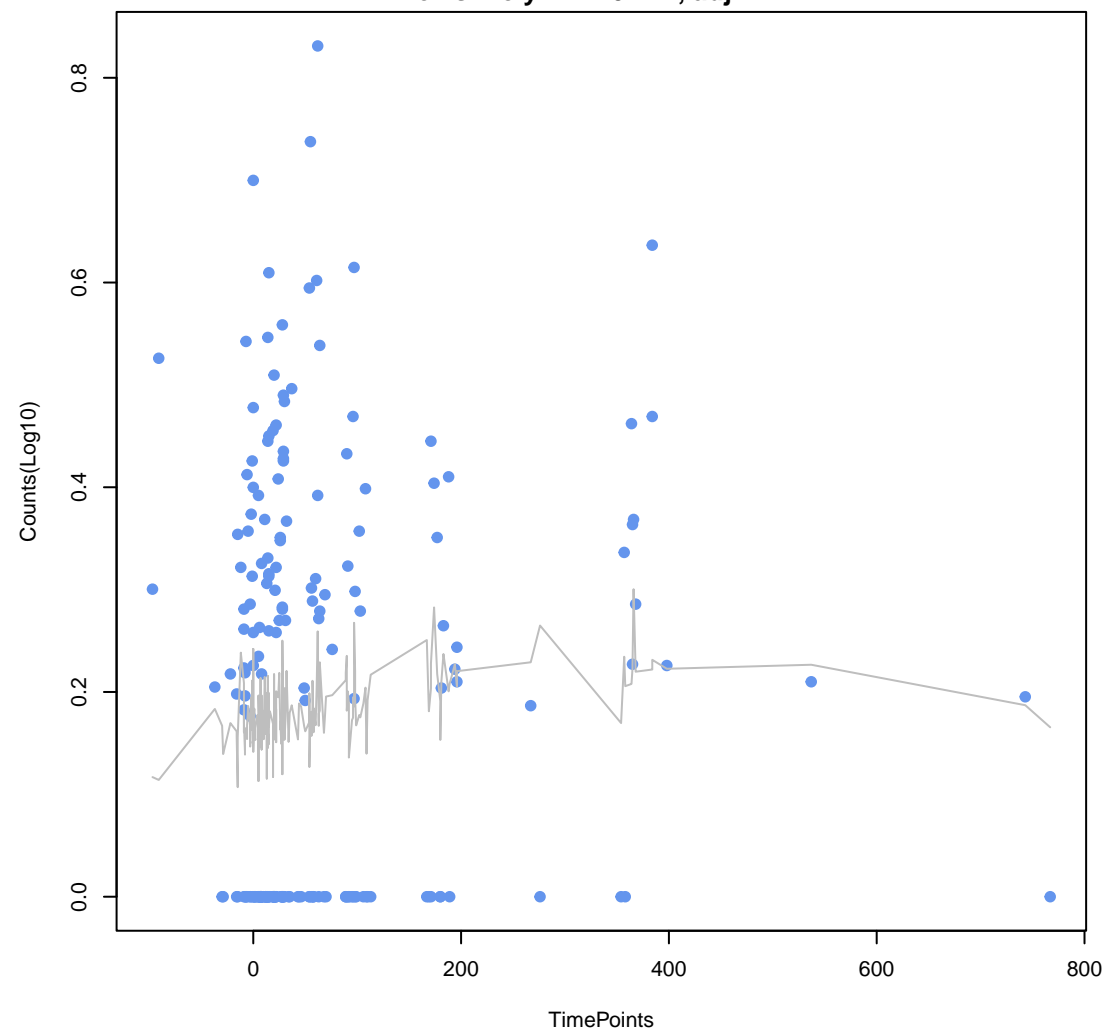
**lmrD**

ANOVA P=0.439, adj. ANOVA-P=0.803  
Line vs. Poly F-P=0.737, adj. F-P=1



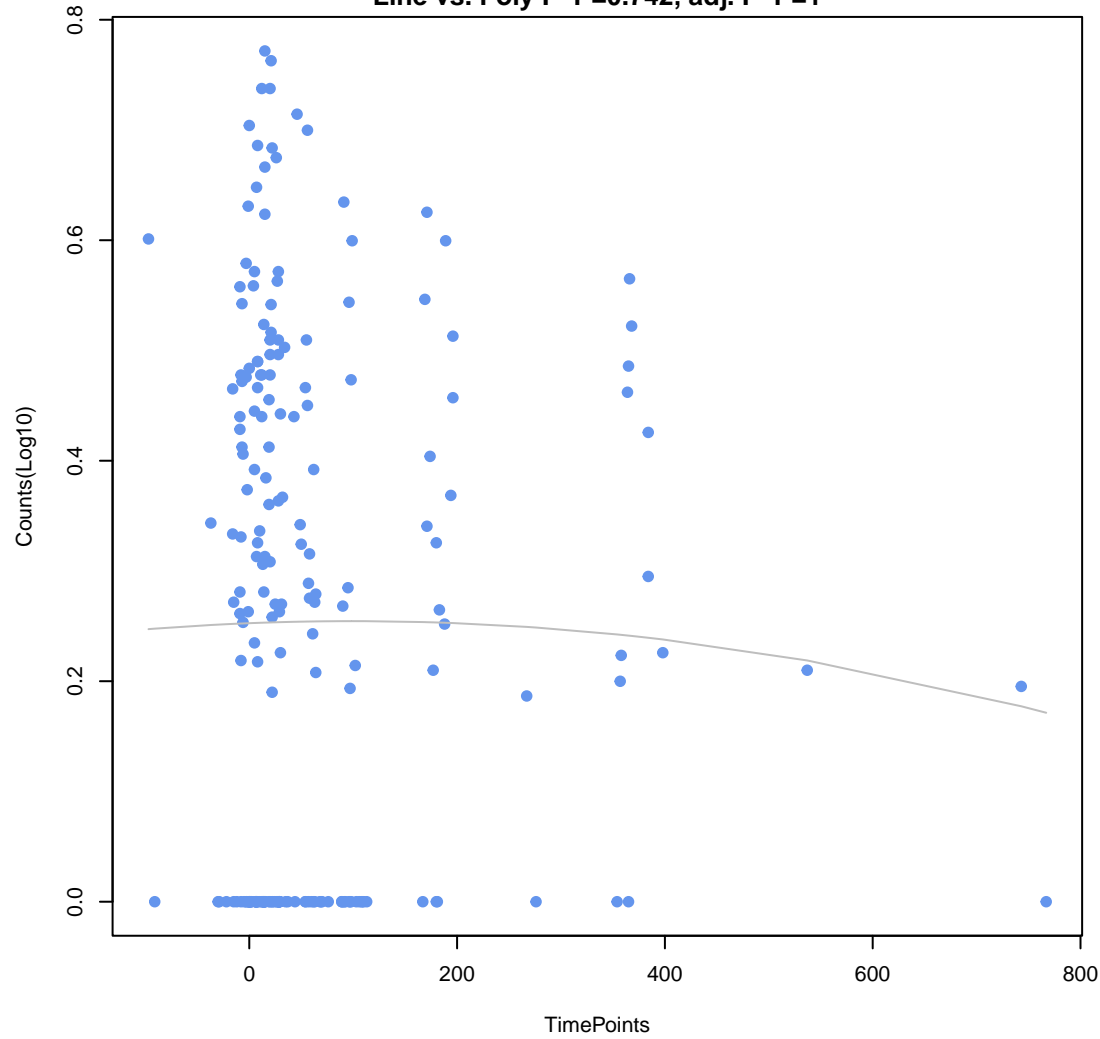
**baeR**

ANOVA P=0.45, adj. ANOVA-P=0.803  
Line vs. Poly F-P=0.741, adj. F-P=1



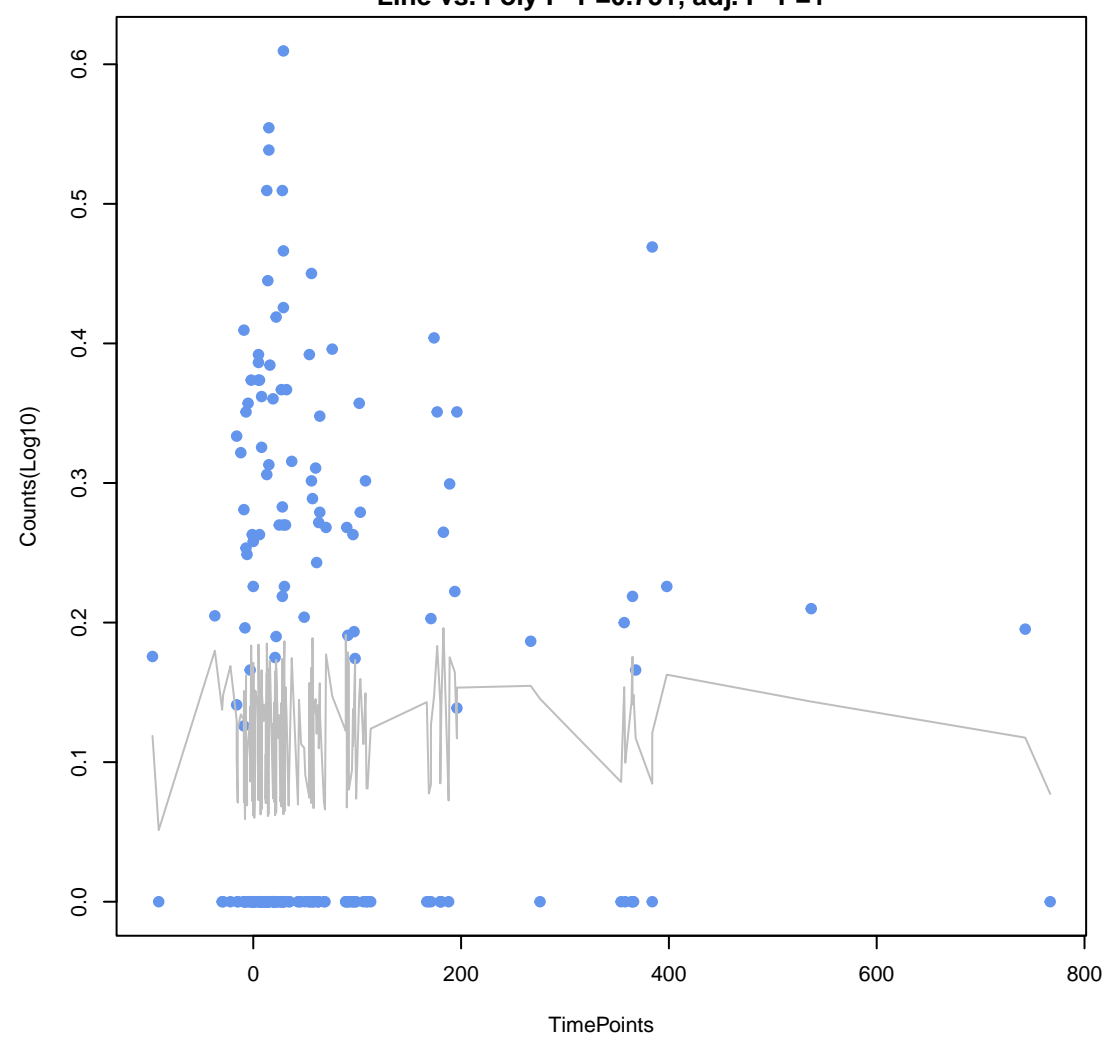
**evgS**

ANOVA P=0.878, adj. ANOVA-P=0.99  
Line vs. Poly F-P=0.742, adj. F-P=1



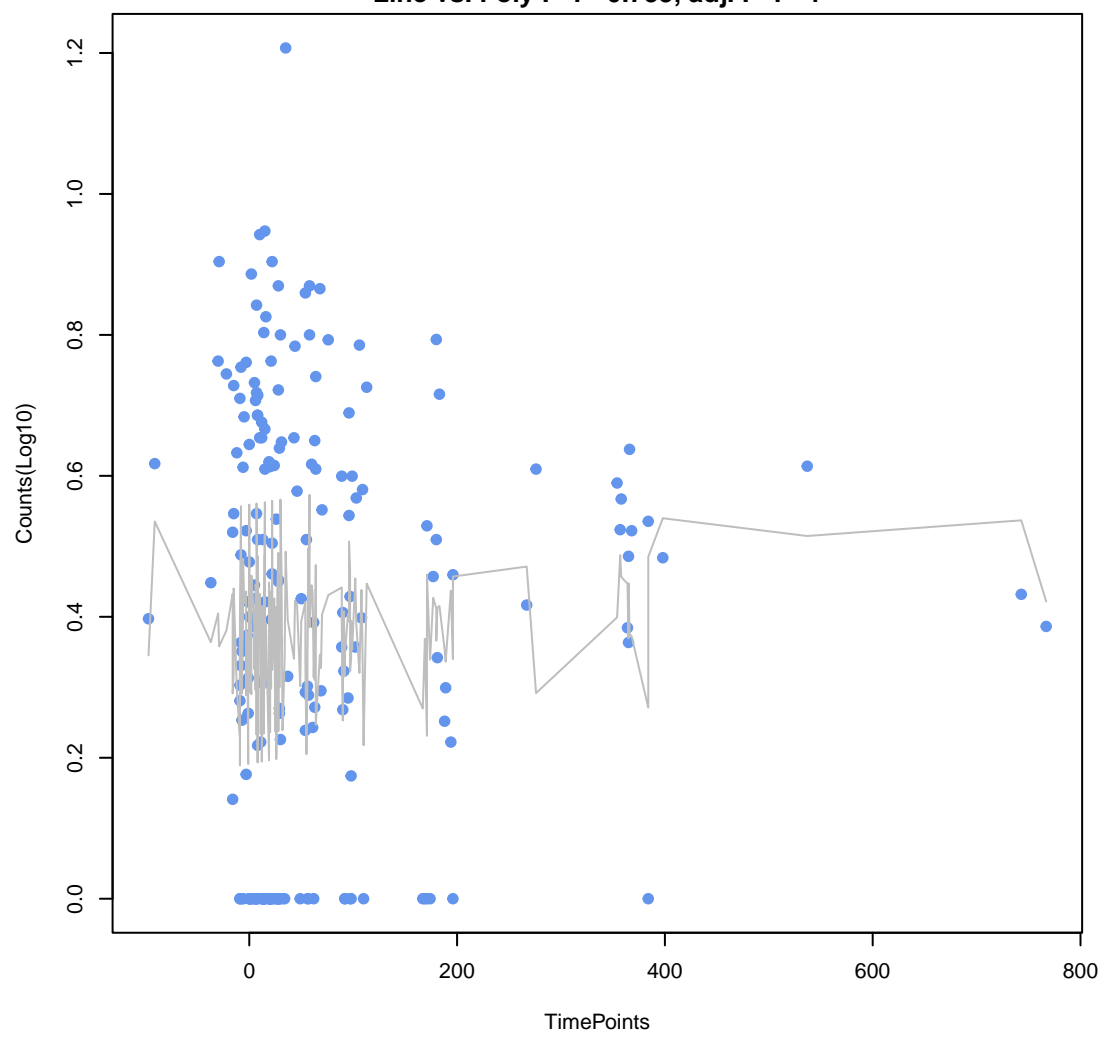
**kdpE**

ANOVA P=0.885, adj. ANOVA-P=0.99  
Line vs. Poly F-P=0.751, adj. F-P=1



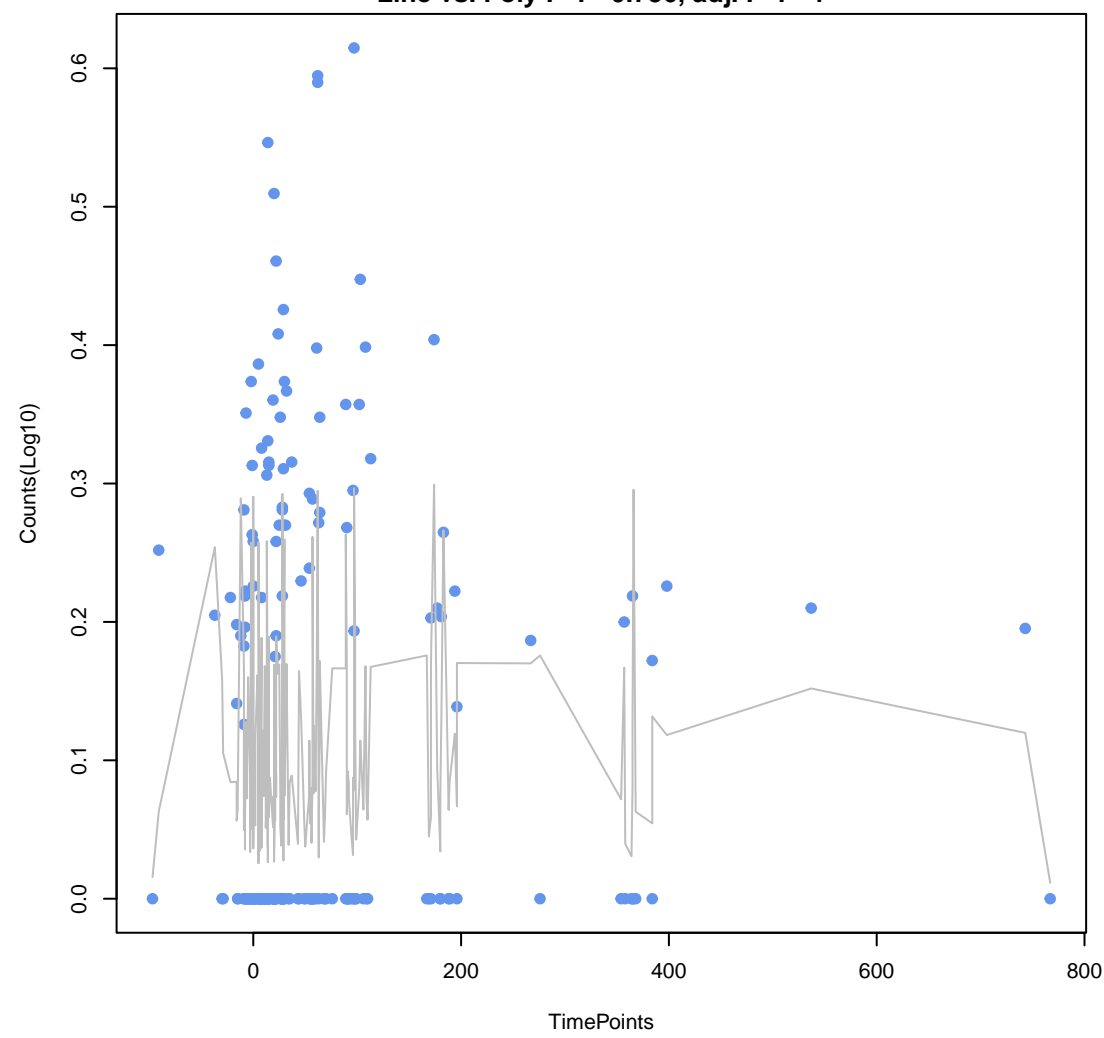
**poxA**

ANOVA P=0.5, adj. ANOVA-P=0.803  
Line vs. Poly F-P=0.755, adj. F-P=1

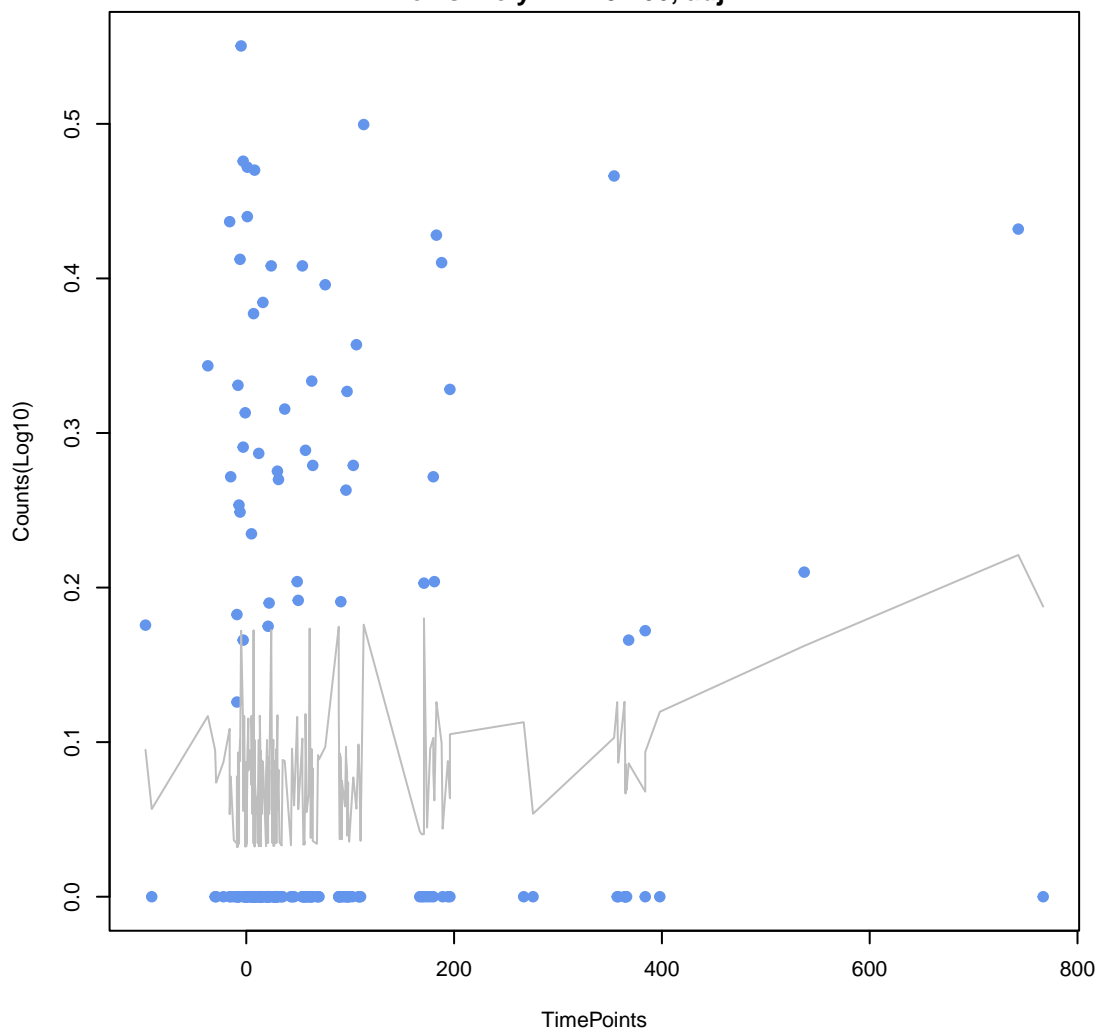


**rsmA**

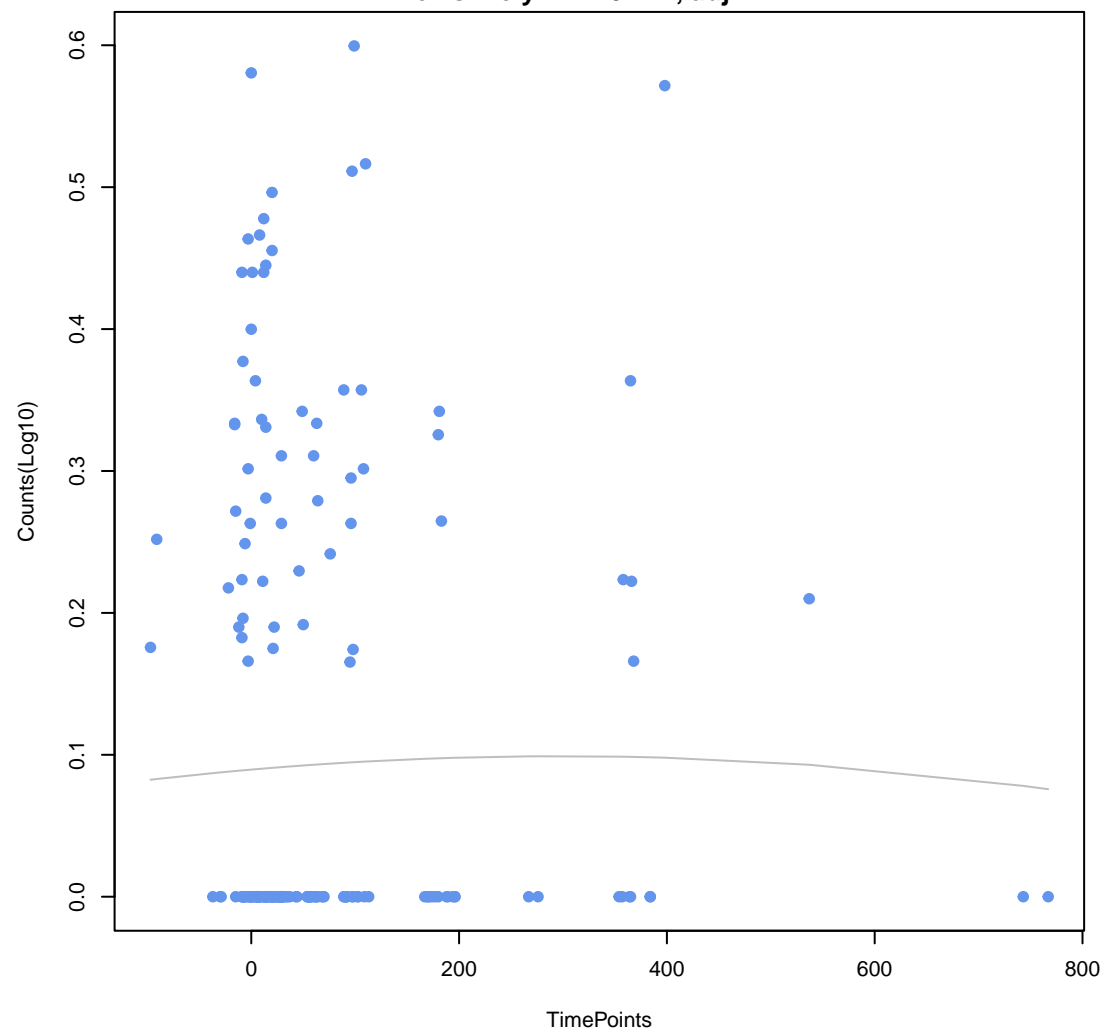
ANOVA P=0.848, adj. ANOVA-P=0.99  
Line vs. Poly F-P=0.756, adj. F-P=1



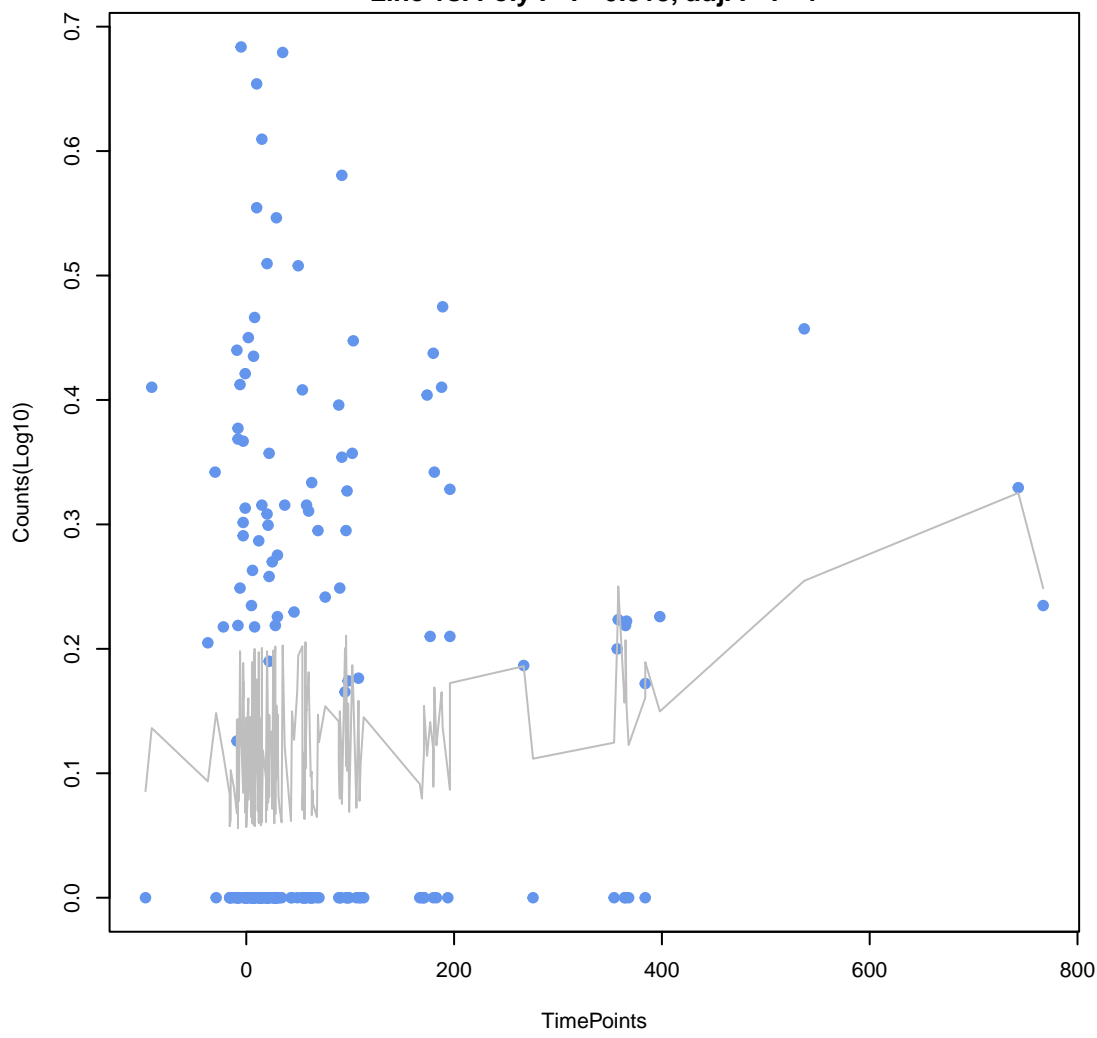
SHV-43

ANOVA P=0.305, adj. ANOVA-P=0.773  
Line vs. Poly F-P=0.766, adj. F-P=1

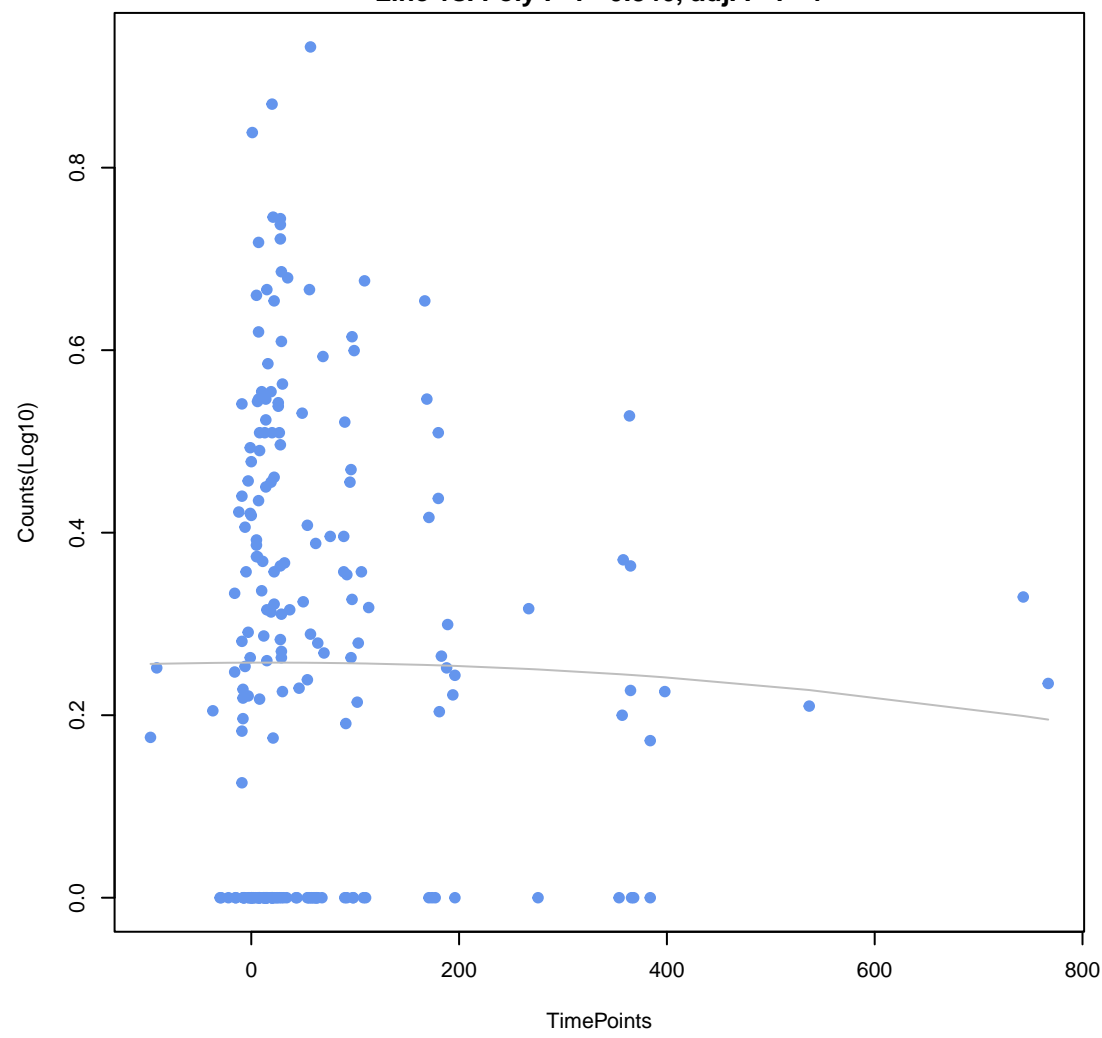
TaeA

ANOVA P=0.953, adj. ANOVA-P=0.99  
Line vs. Poly F-P=0.777, adj. F-P=1

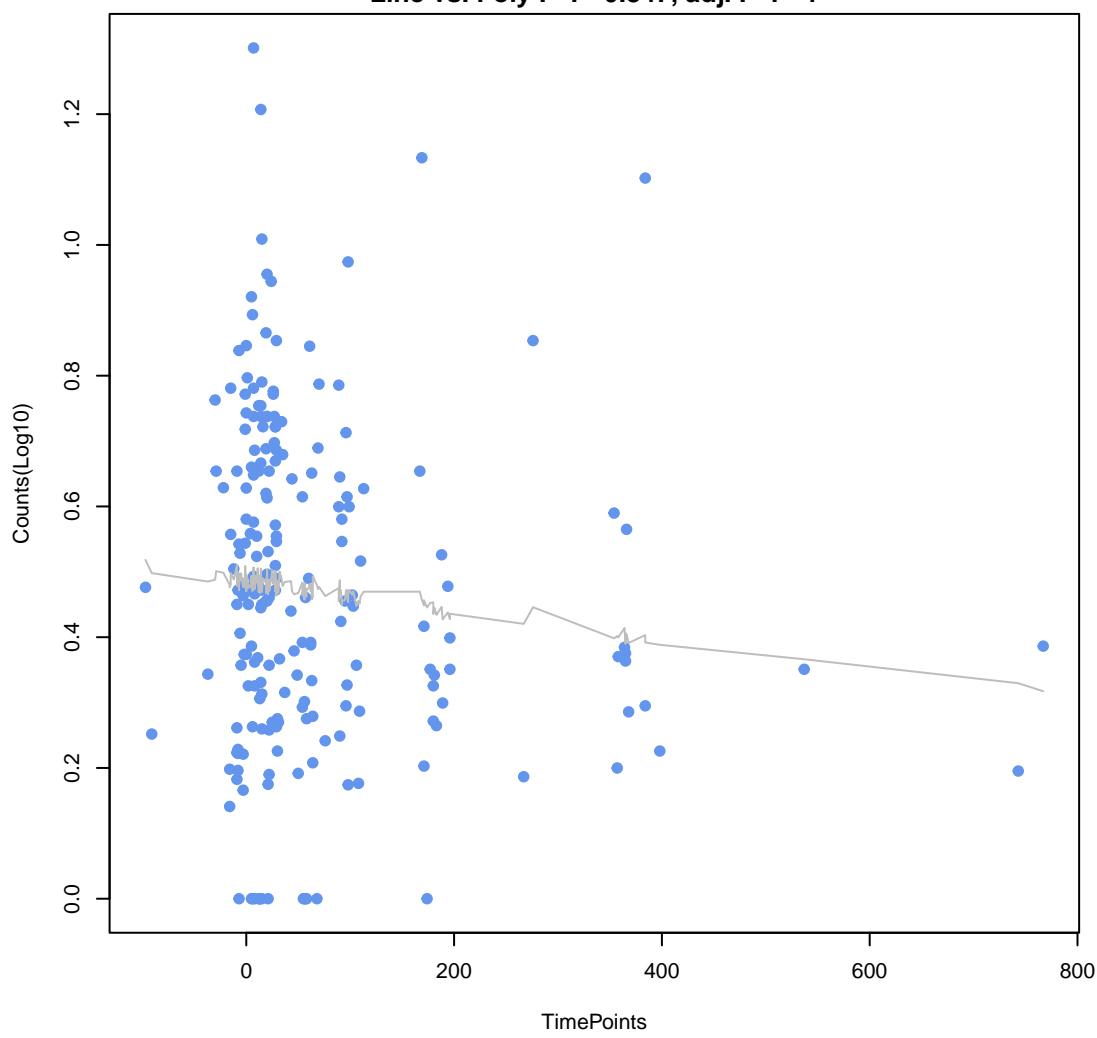
myrA

ANOVA P=0.144, adj. ANOVA-P=0.572  
Line vs. Poly F-P=0.818, adj. F-P=1

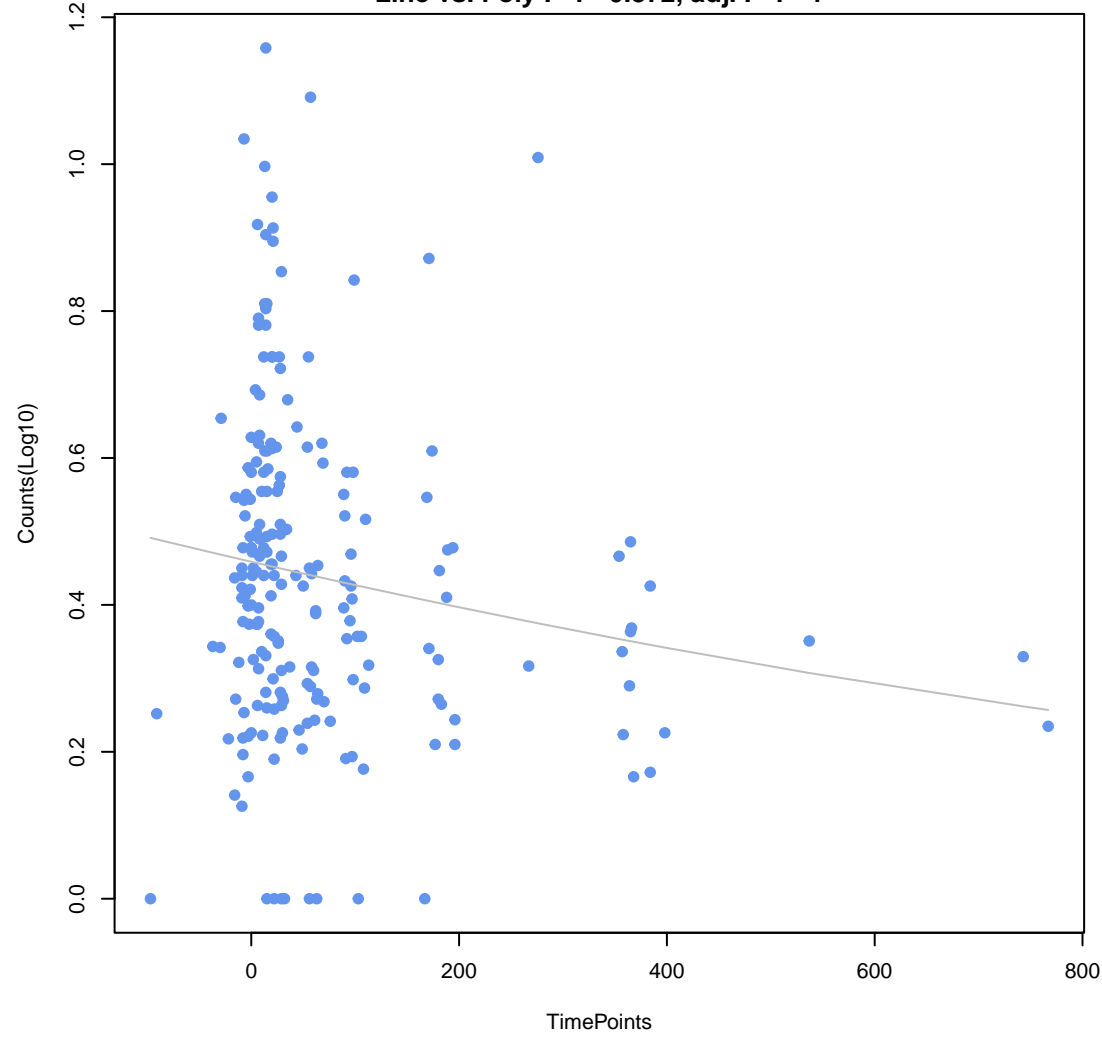
fexA

ANOVA P=0.919, adj. ANOVA-P=0.99  
Line vs. Poly F-P=0.846, adj. F-P=1

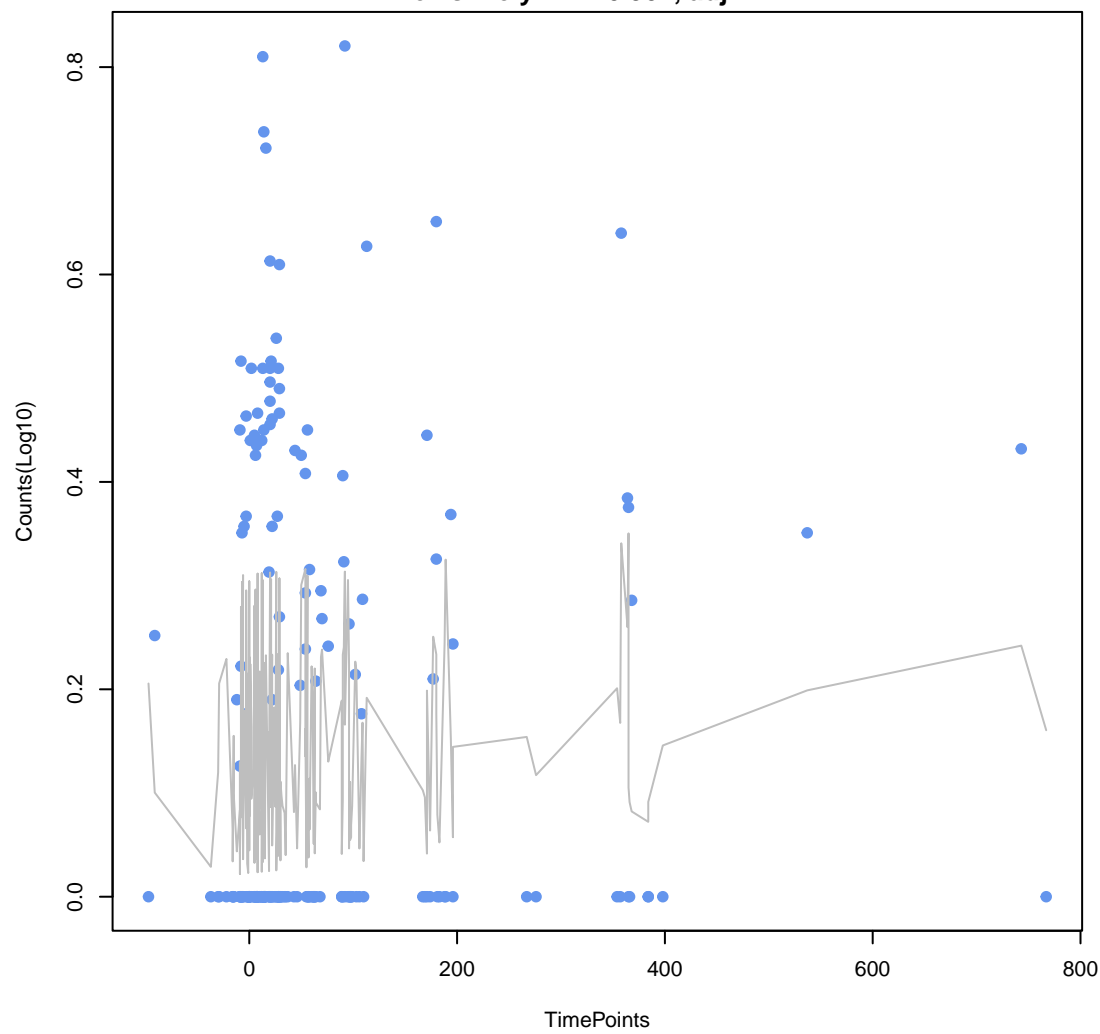
tet(M)

ANOVA P=0.34, adj. ANOVA-P=0.777  
Line vs. Poly F-P=0.847, adj. F-P=1

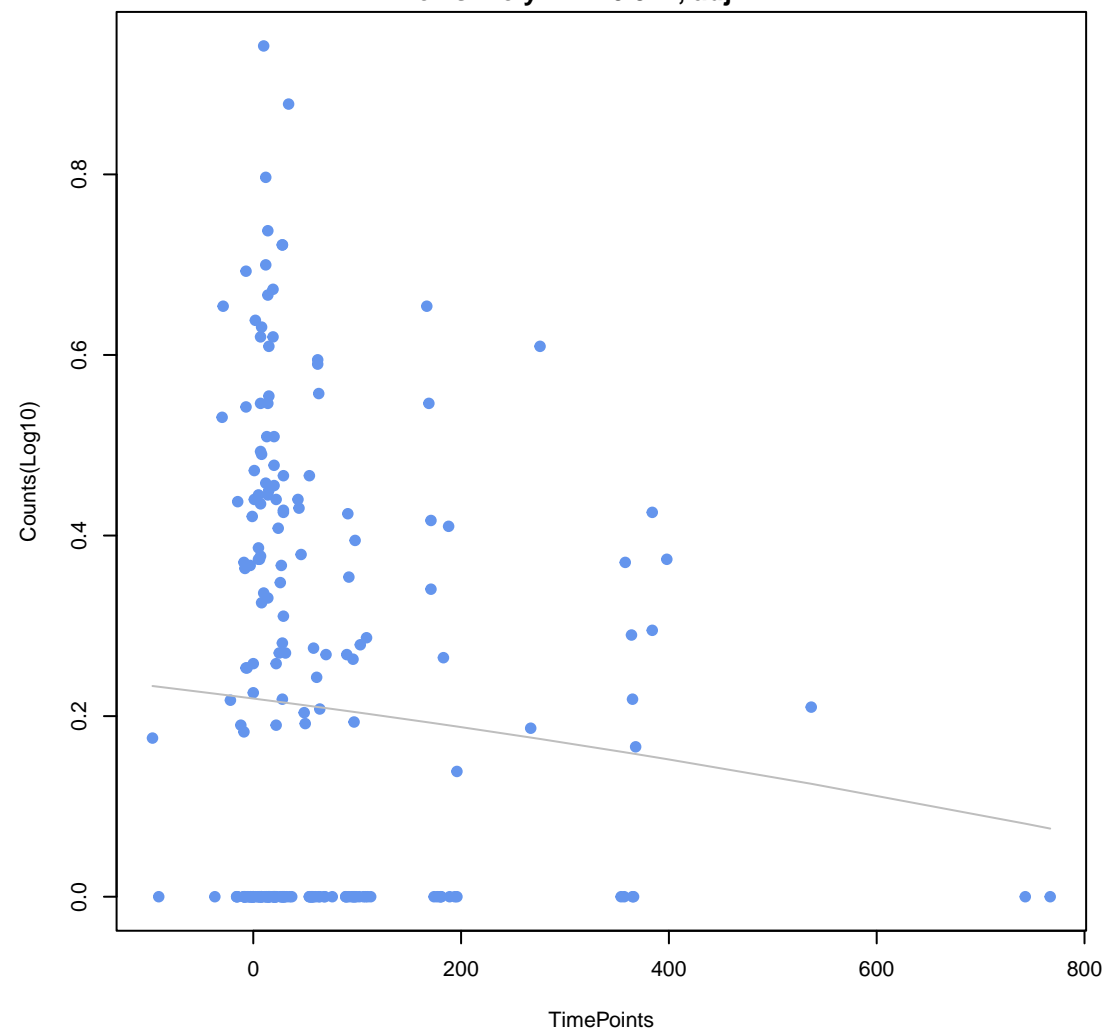
tet(W)

ANOVA P=0.0766, adj. ANOVA-P=0.432  
Line vs. Poly F-P=0.872, adj. F-P=1

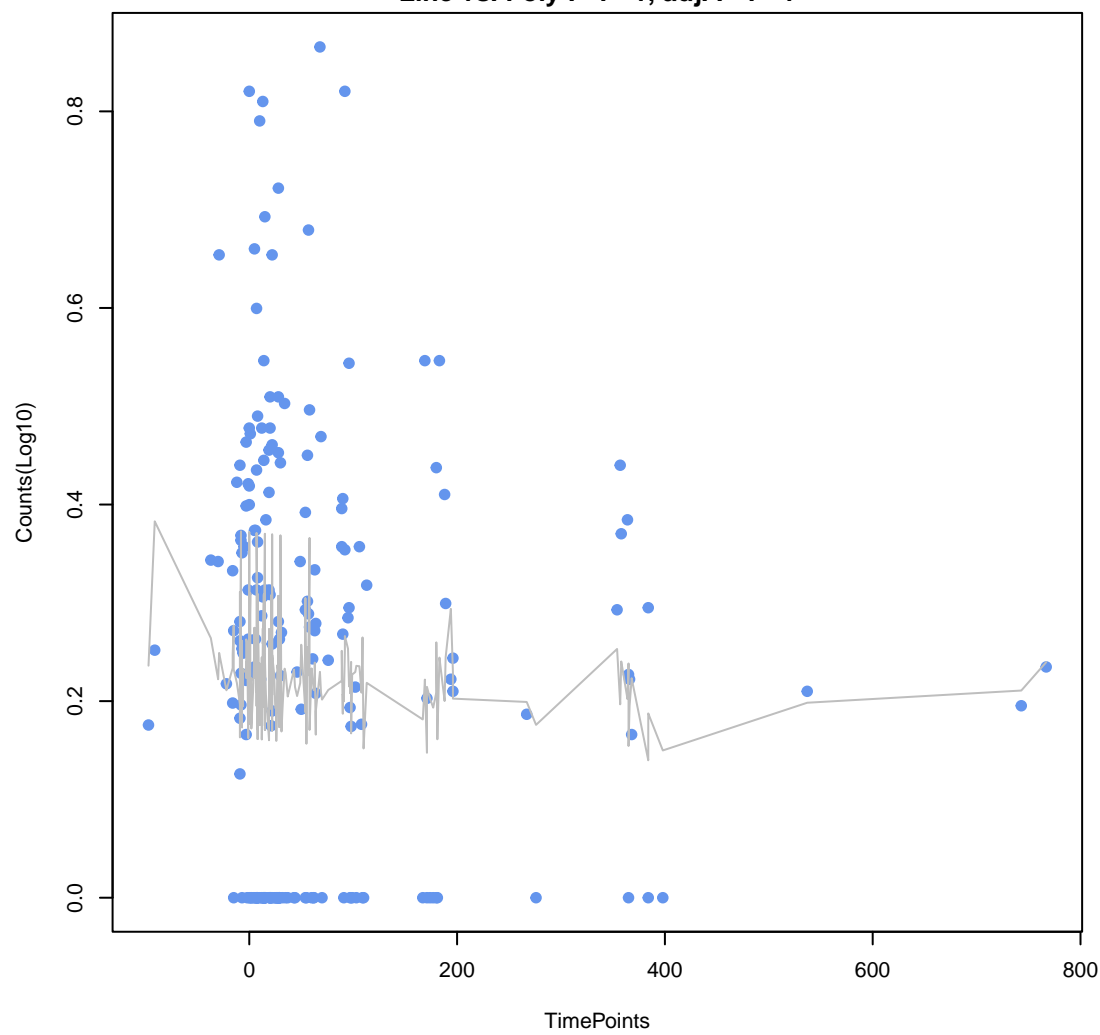
**mdeA**  
ANOVA P=0.466, adj. ANOVA-P=0.803  
Line vs. Poly F-P=0.901, adj. F-P=1



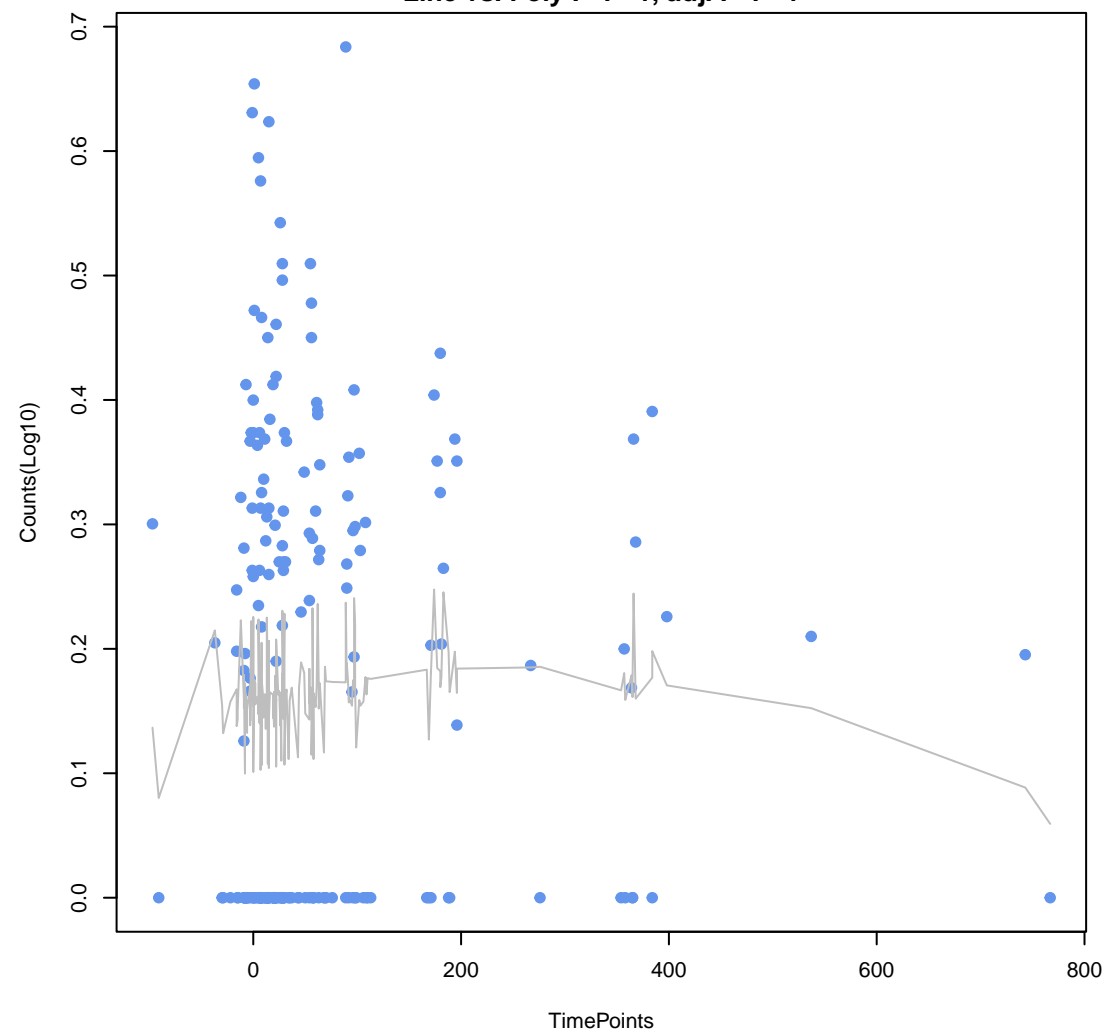
**msrC**  
ANOVA P=0.462, adj. ANOVA-P=0.803  
Line vs. Poly F-P=0.927, adj. F-P=1



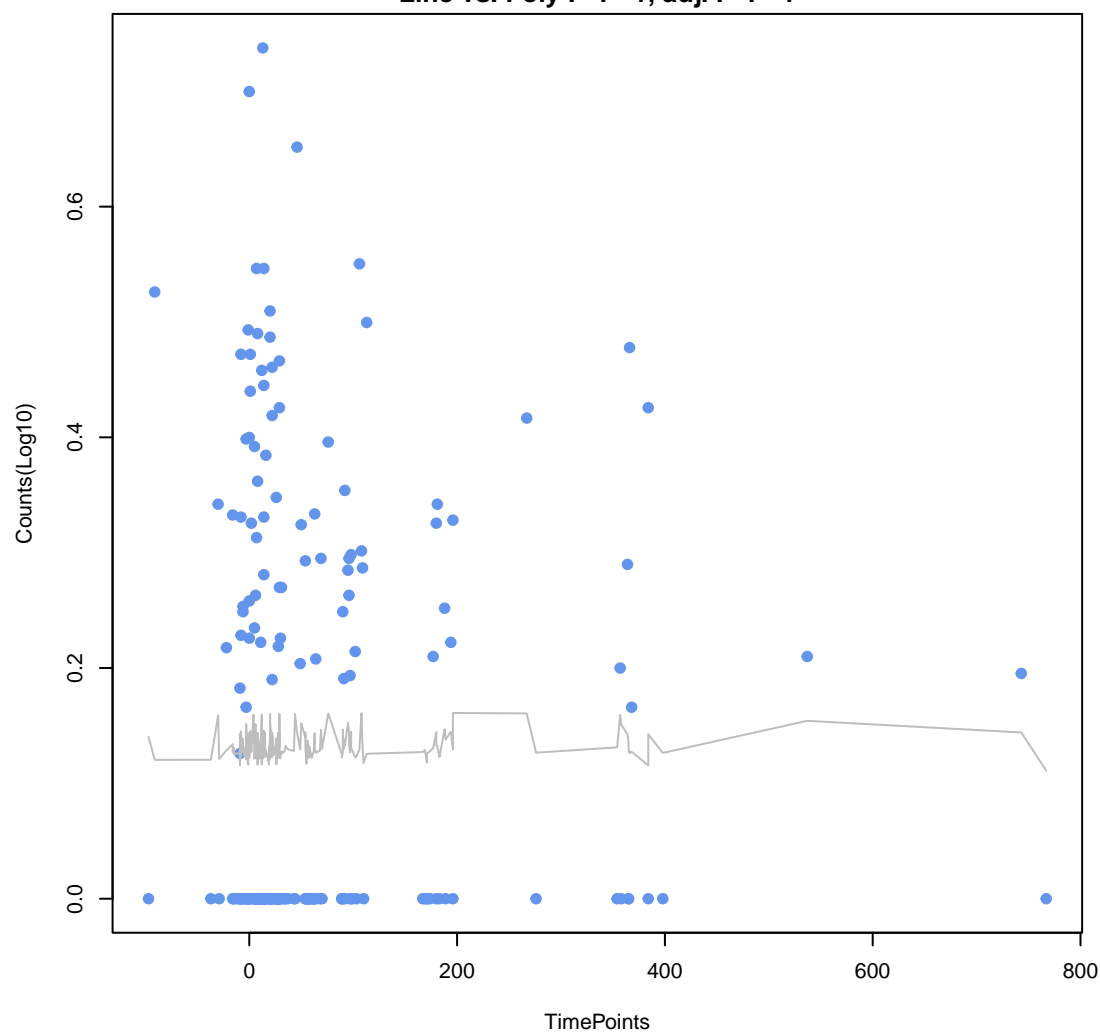
**InuC**  
ANOVA P=0.901, adj. ANOVA-P=0.99  
Line vs. Poly F-P=1, adj. F-P=1



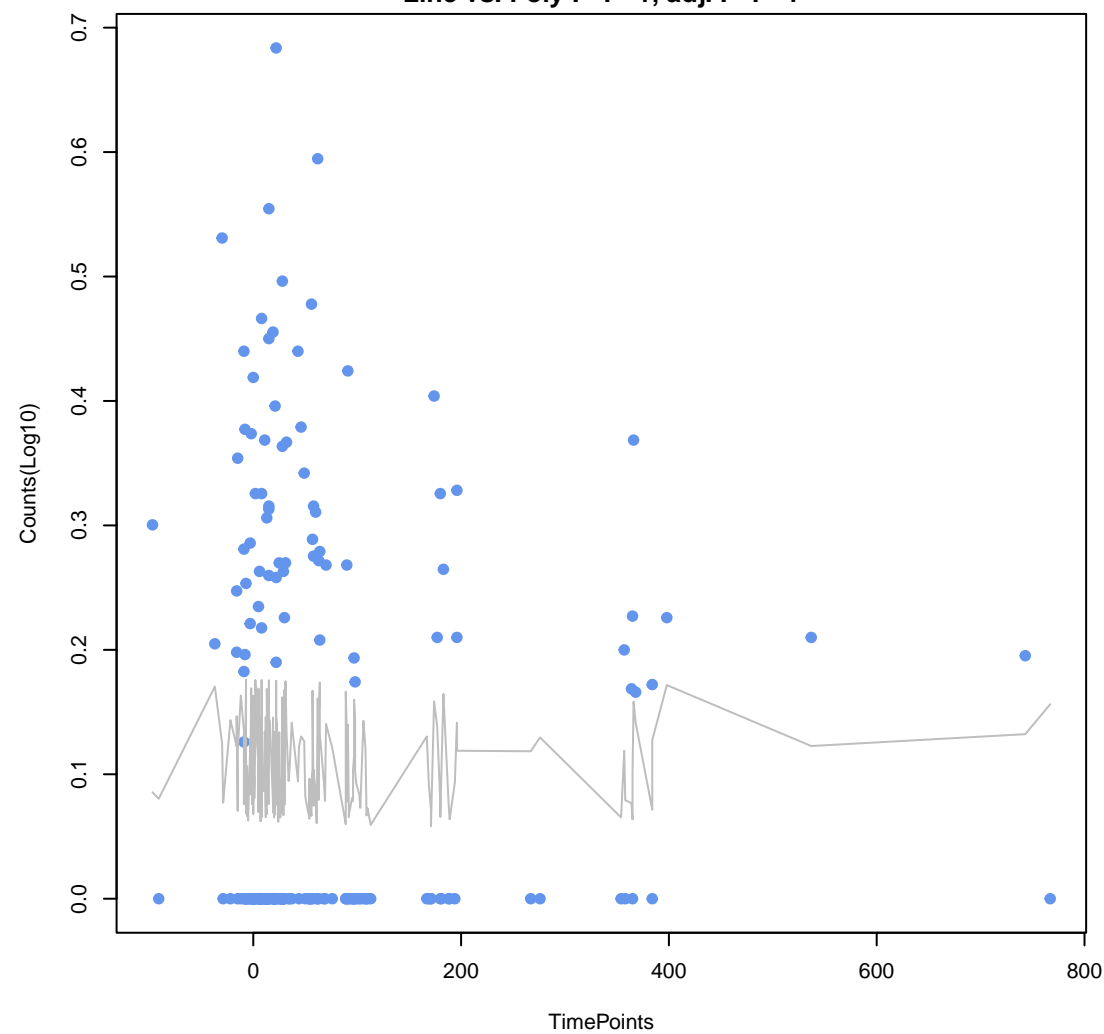
**emrA**  
ANOVA P=0.652, adj. ANOVA-P=0.84  
Line vs. Poly F-P=1, adj. F-P=1



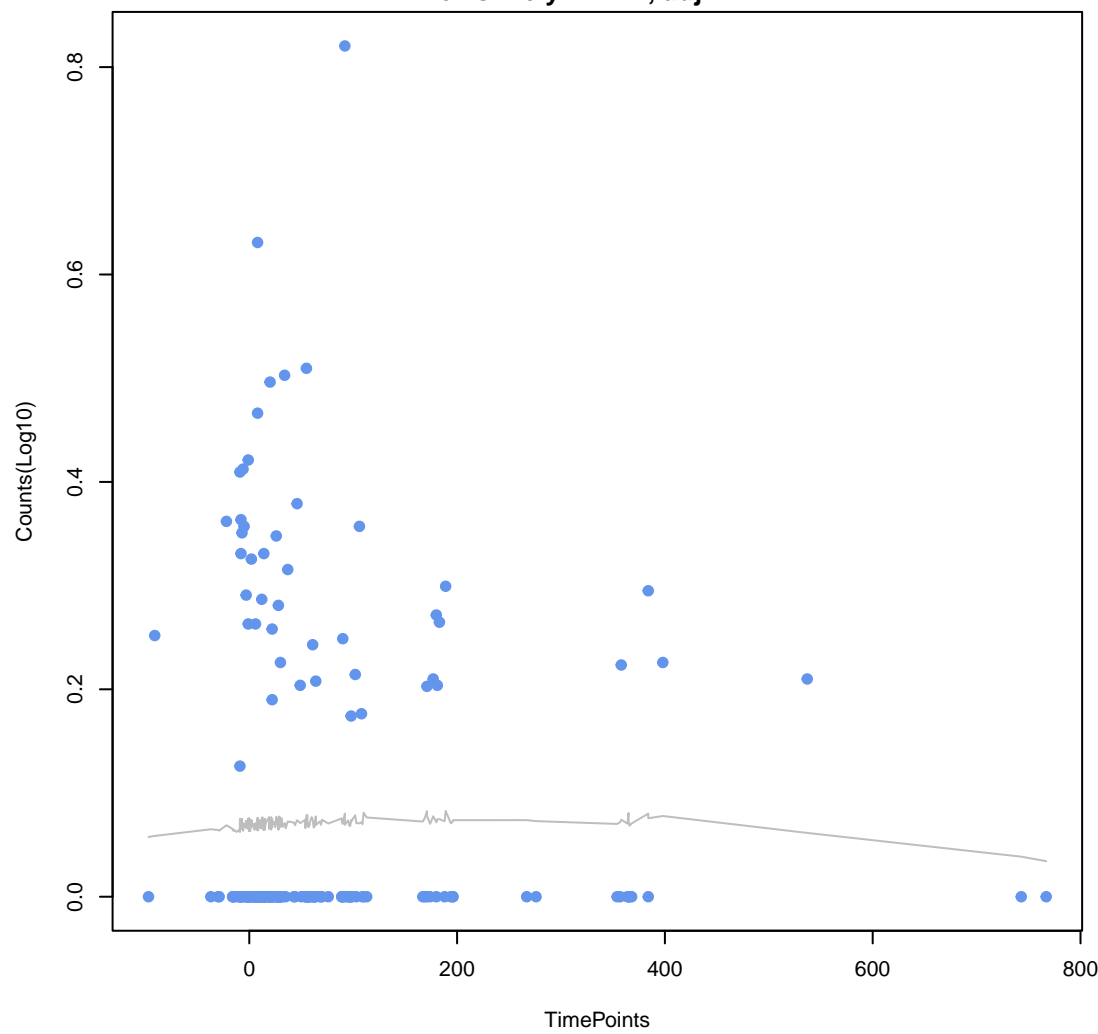
**MuxC**  
ANOVA P=0.99, adj. ANOVA-P=0.99  
Line vs. Poly F-P=1, adj. F-P=1



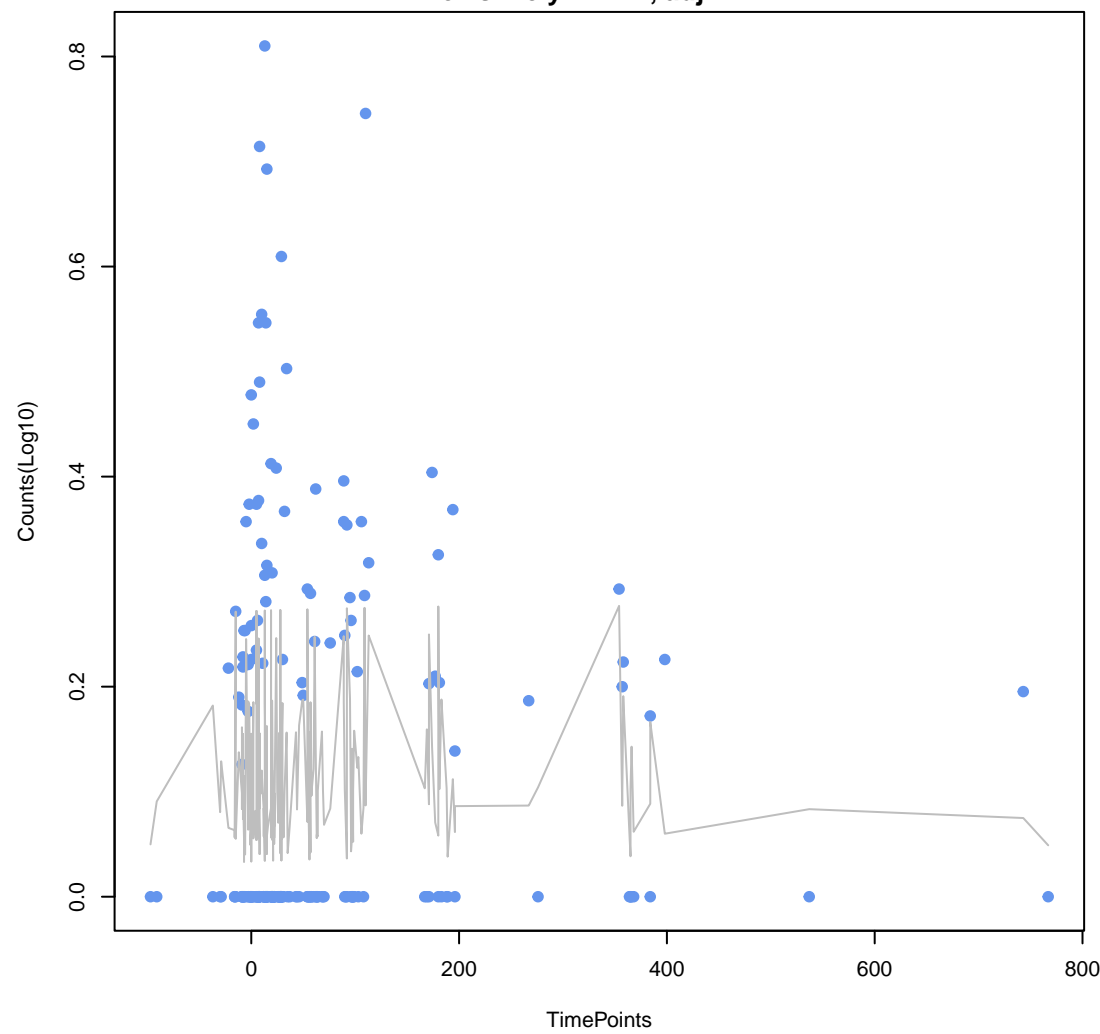
**emrK**  
ANOVA P=0.984, adj. ANOVA-P=0.99  
Line vs. Poly F-P=1, adj. F-P=1



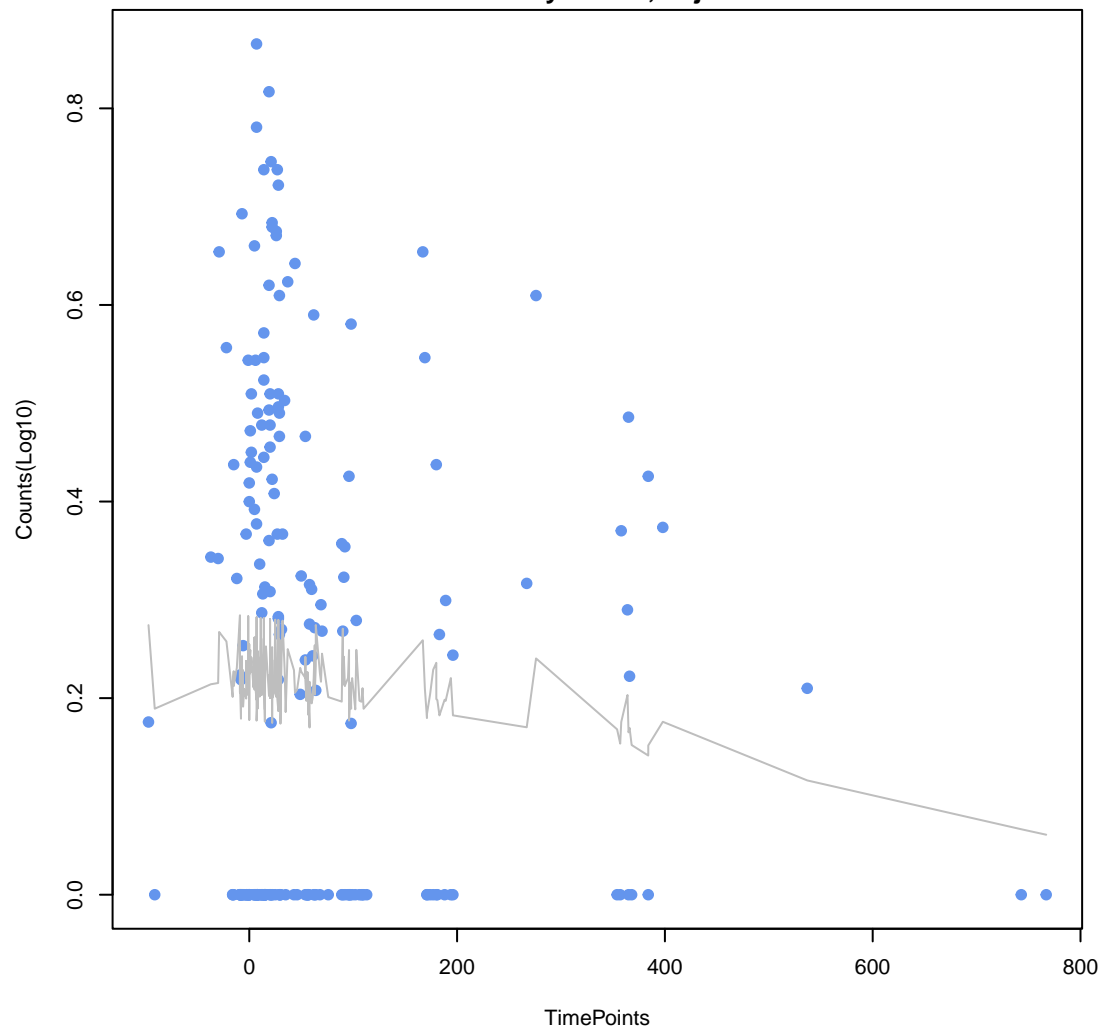
**Klebsiella pneumoniae acrA**  
ANOVA P=0.922, adj. ANOVA-P=0.99  
Line vs. Poly F-P=1, adj. F-P=1



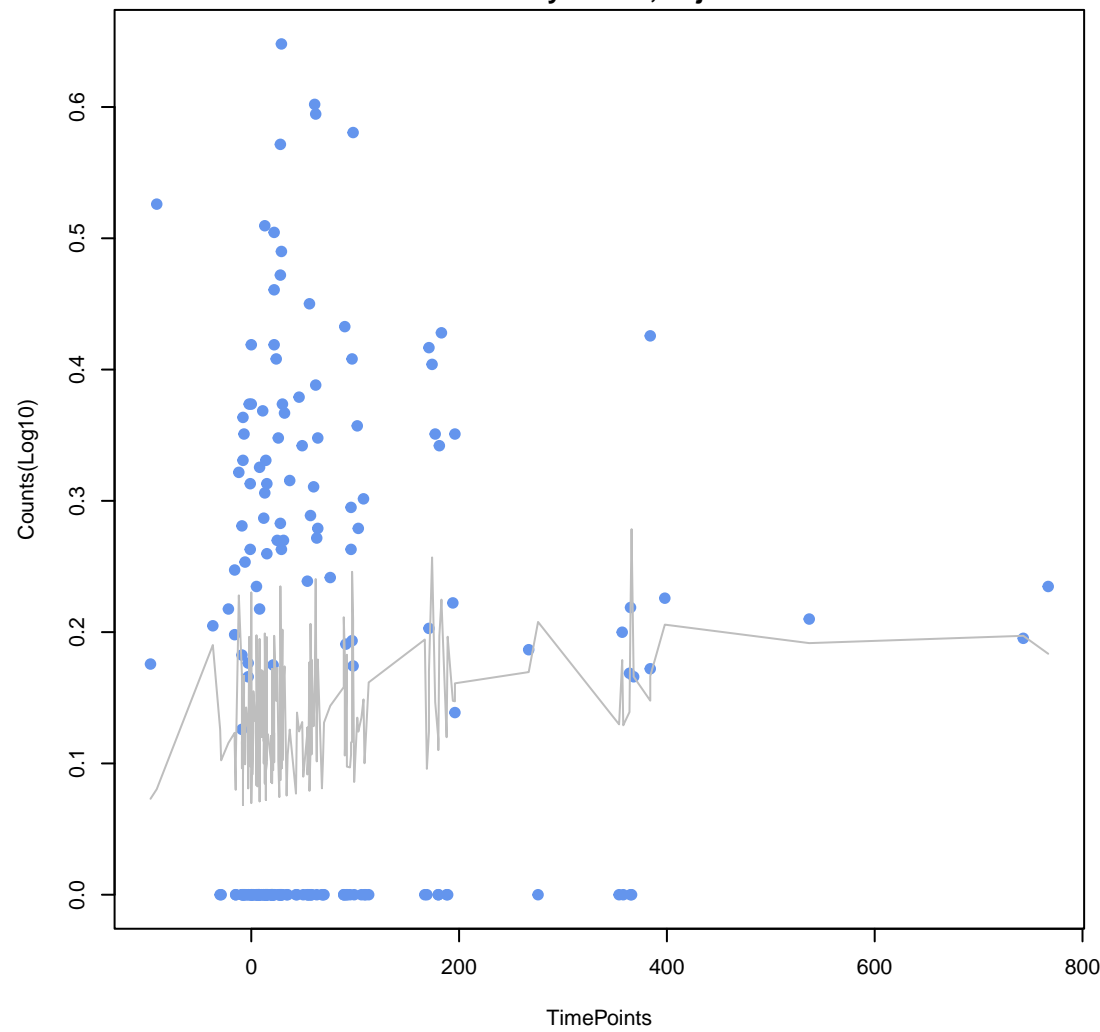
**CfxA3**  
ANOVA P=0.986, adj. ANOVA-P=0.99  
Line vs. Poly F-P=1, adj. F-P=1



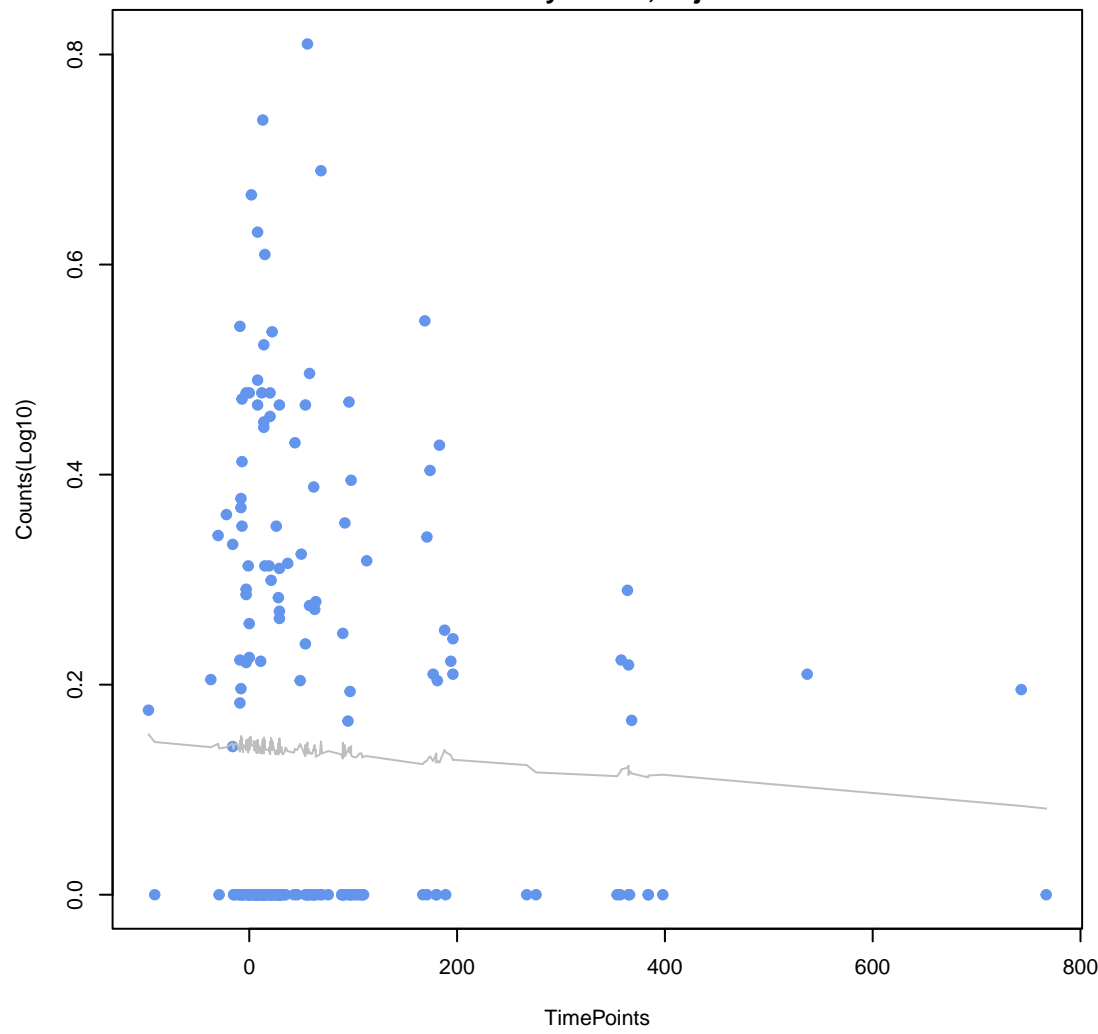
**vanS gene in vanA cluster**  
ANOVA P=0.472, adj. ANOVA-P=0.803  
Line vs. Poly F-P=1, adj. F-P=1



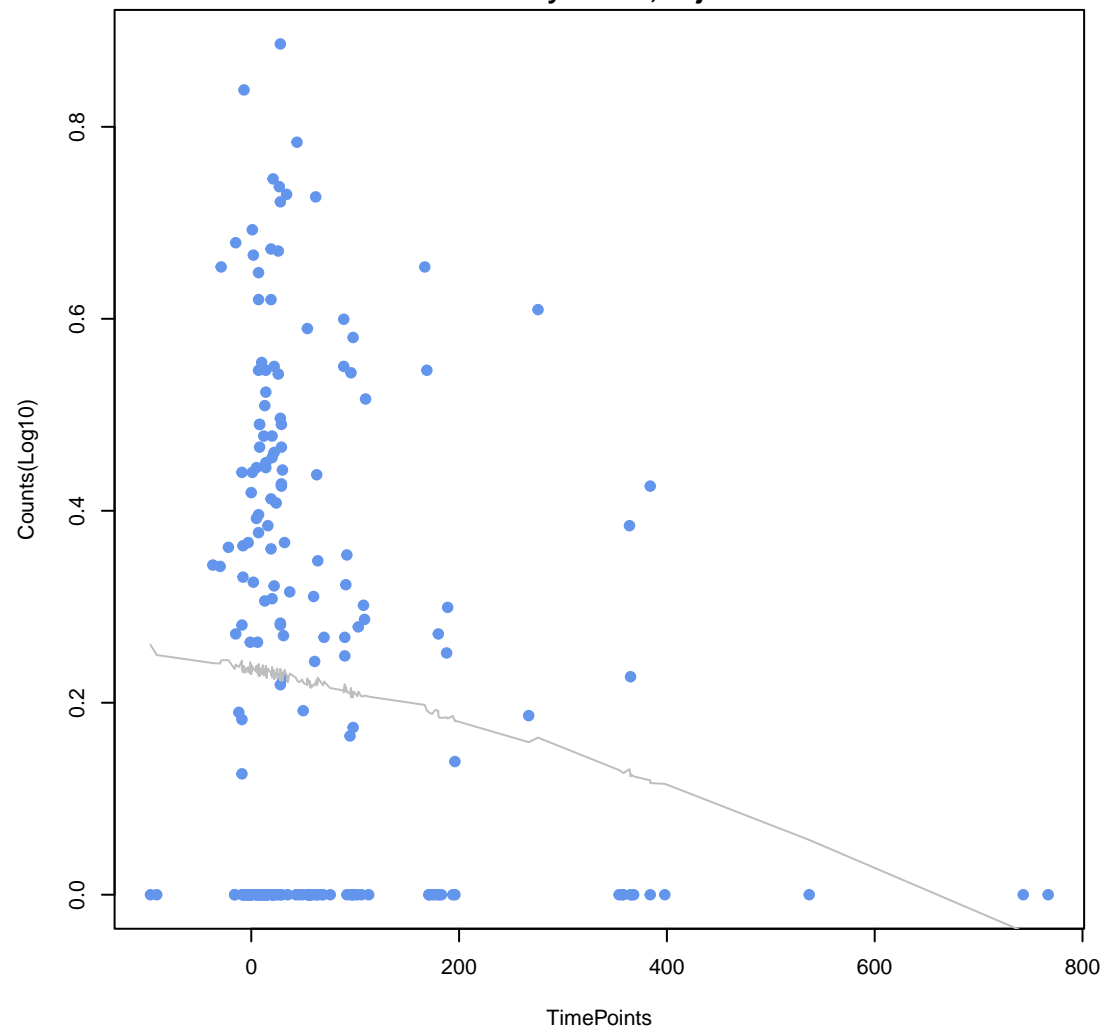
**emrR**  
ANOVA P=0.474, adj. ANOVA-P=0.803  
Line vs. Poly F-P=1, adj. F-P=1



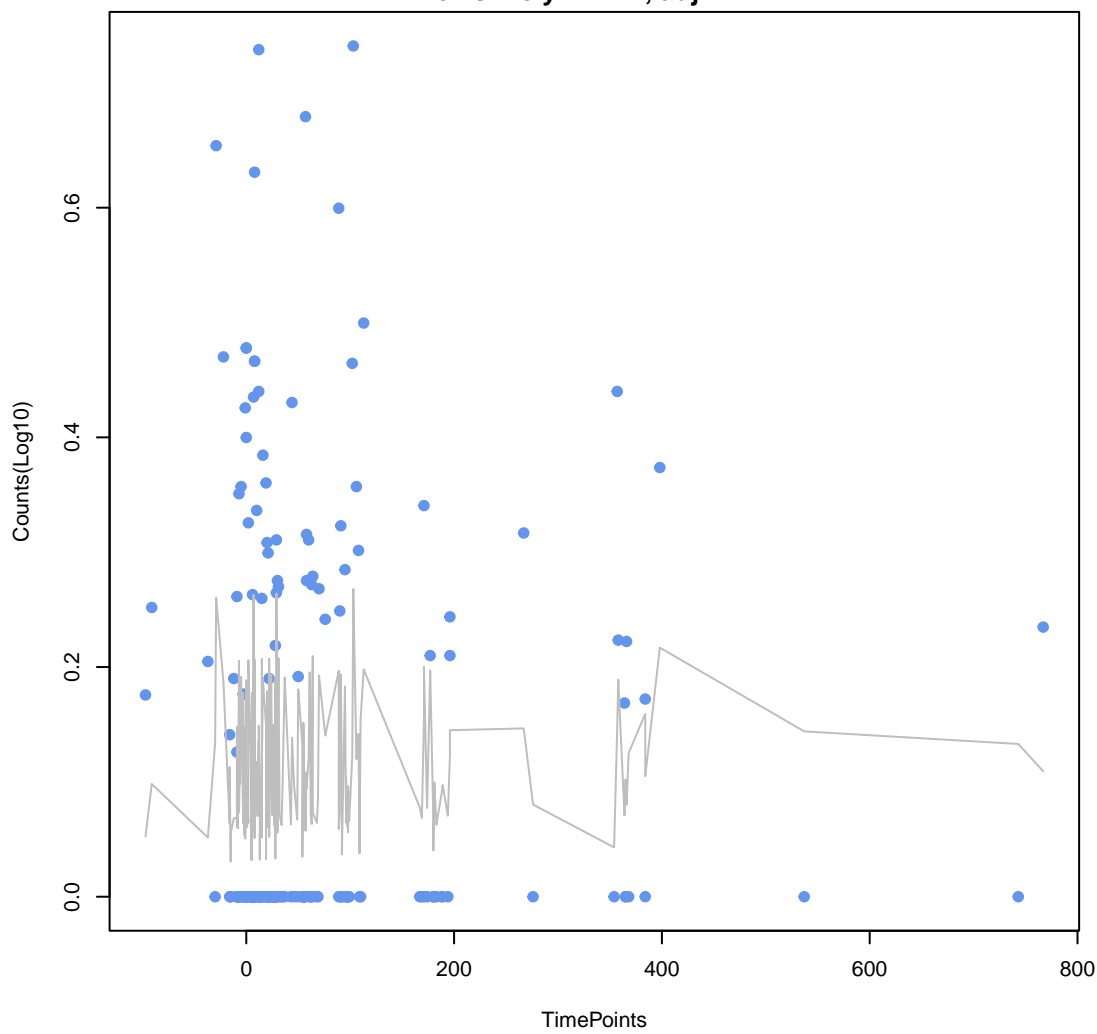
**Bifidobacterium bifidum ileS conferring resistance to mupirocin**  
ANOVA P=0.813, adj. ANOVA-P=0.99  
Line vs. Poly F-P=1, adj. F-P=1



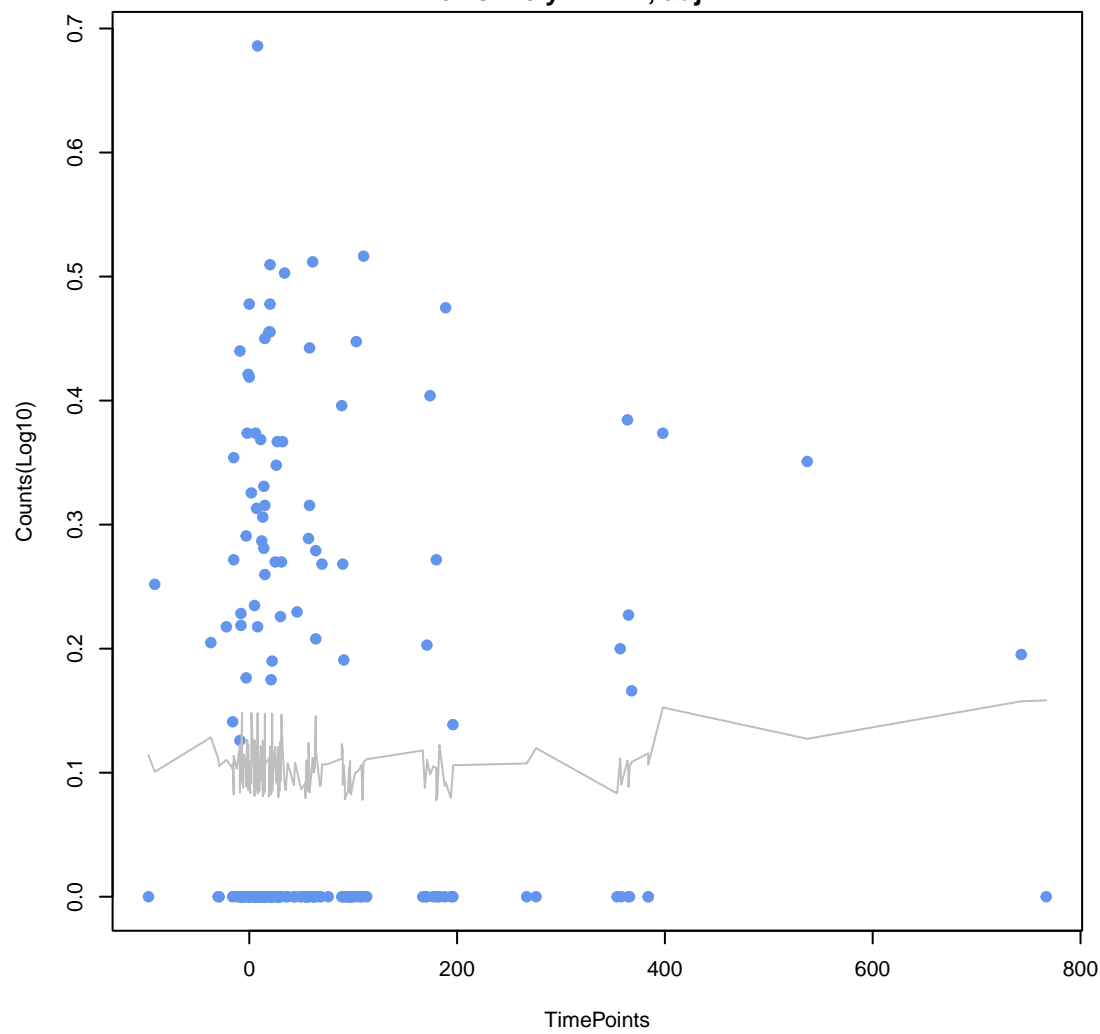
**vanH gene in vanA cluster**  
ANOVA P=0.0768, adj. ANOVA-P=0.432  
Line vs. Poly F-P=1, adj. F-P=1



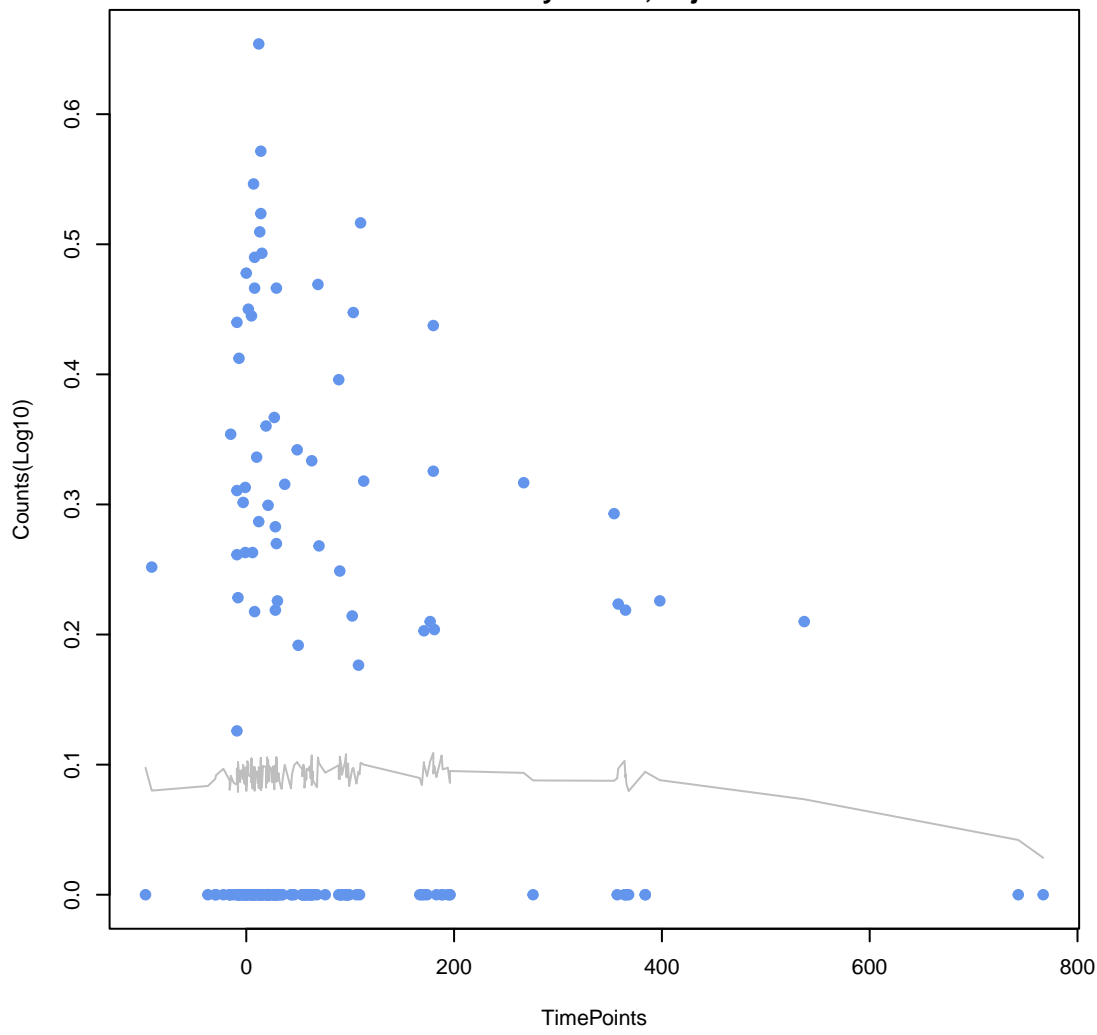
**vanX gene in vanD cluster**  
ANOVA P=0.954, adj. ANOVA-P=0.99  
Line vs. Poly F-P=1, adj. F-P=1



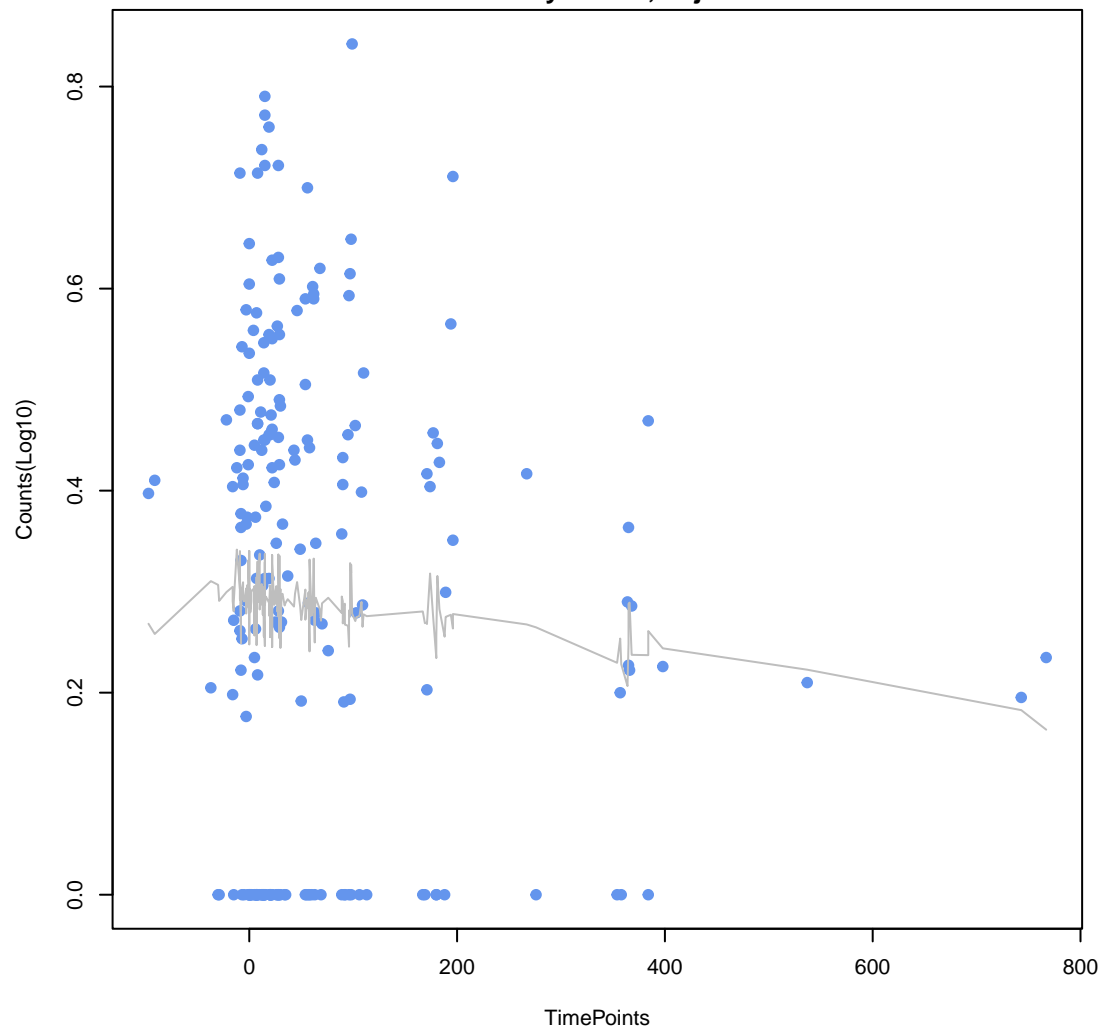
**APH(3'')-lb**  
ANOVA P=0.891, adj. ANOVA-P=0.99  
Line vs. Poly F-P=1, adj. F-P=1



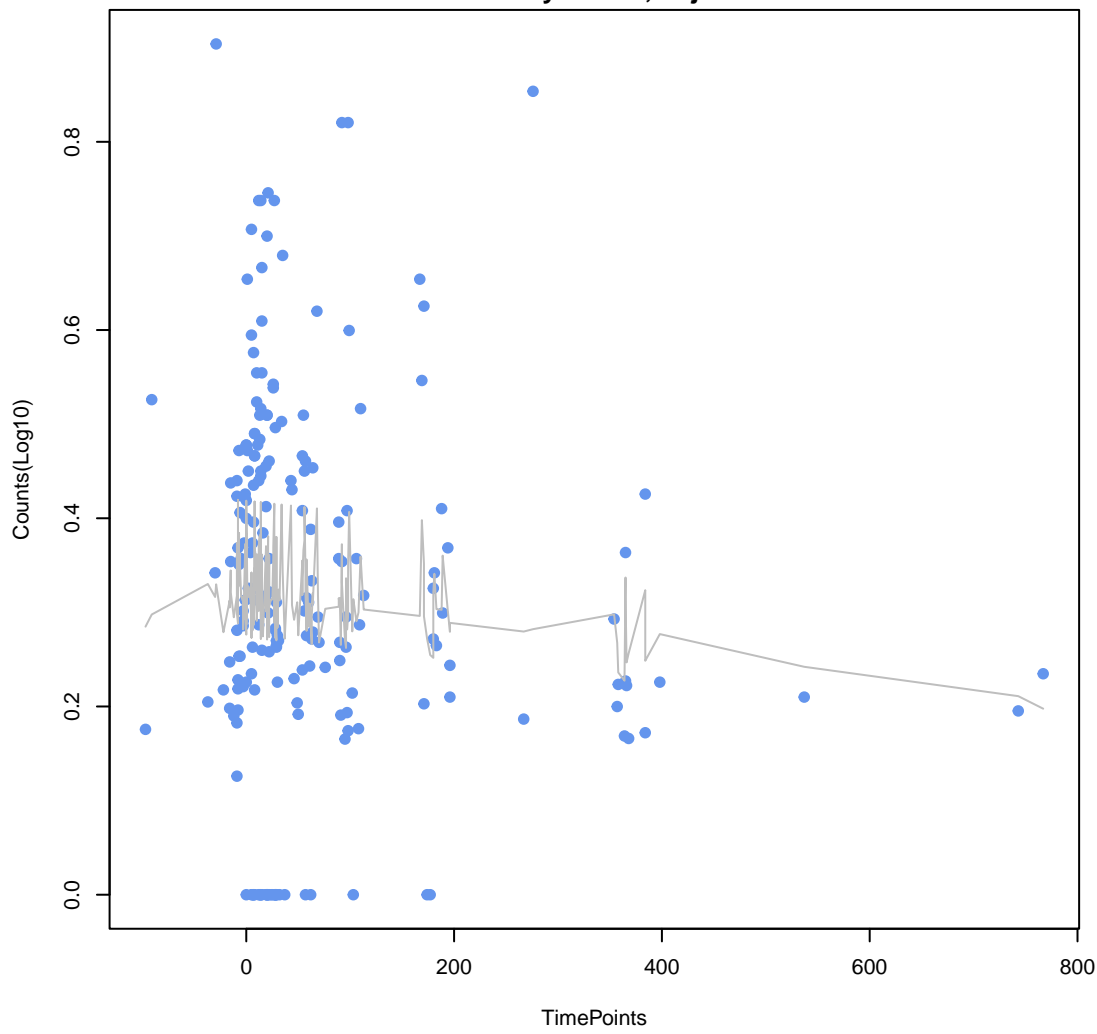
**oleB**  
ANOVA P=0.887, adj. ANOVA-P=0.99  
Line vs. Poly F-P=1, adj. F-P=1



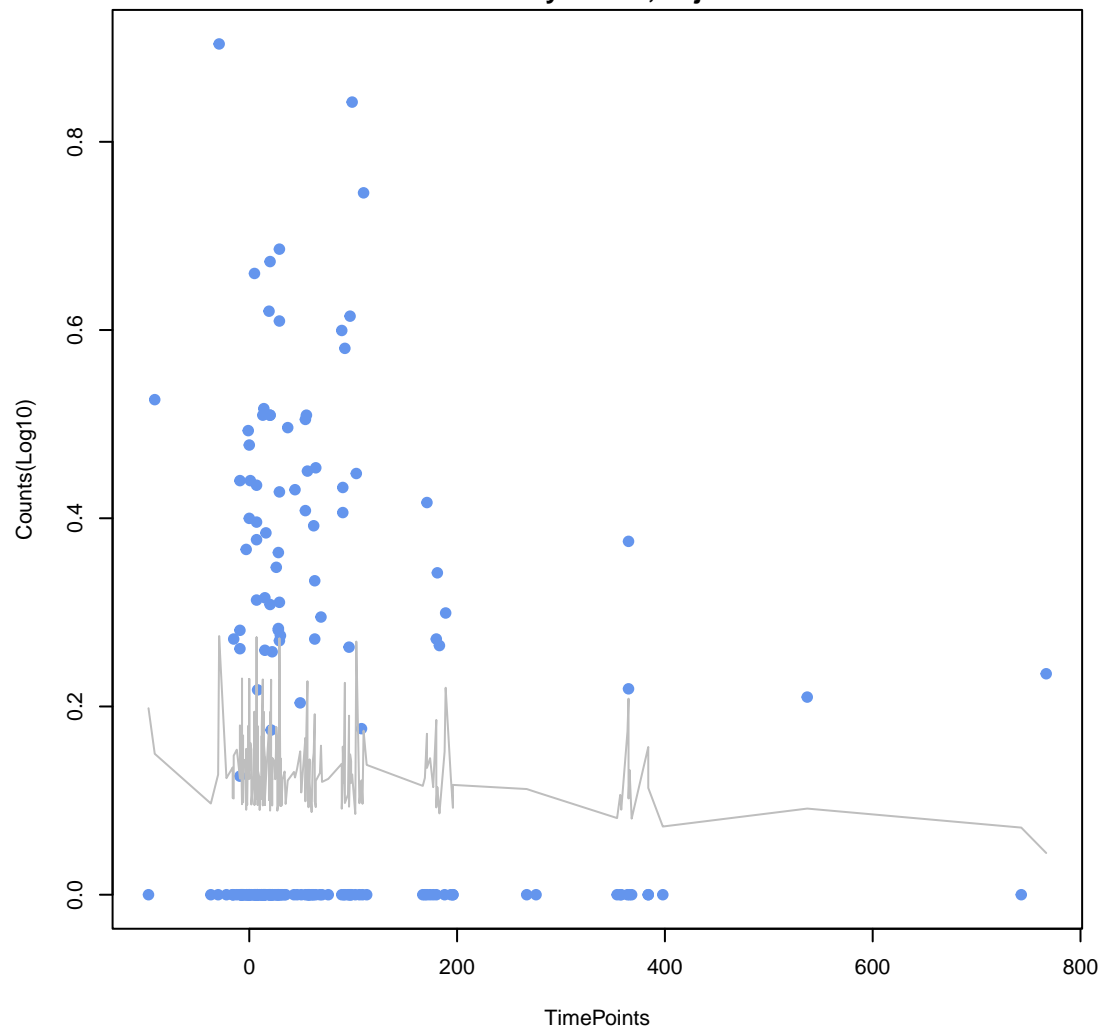
**mdtC**  
ANOVA P=0.564, adj. ANOVA-P=0.822  
Line vs. Poly F-P=1, adj. F-P=1

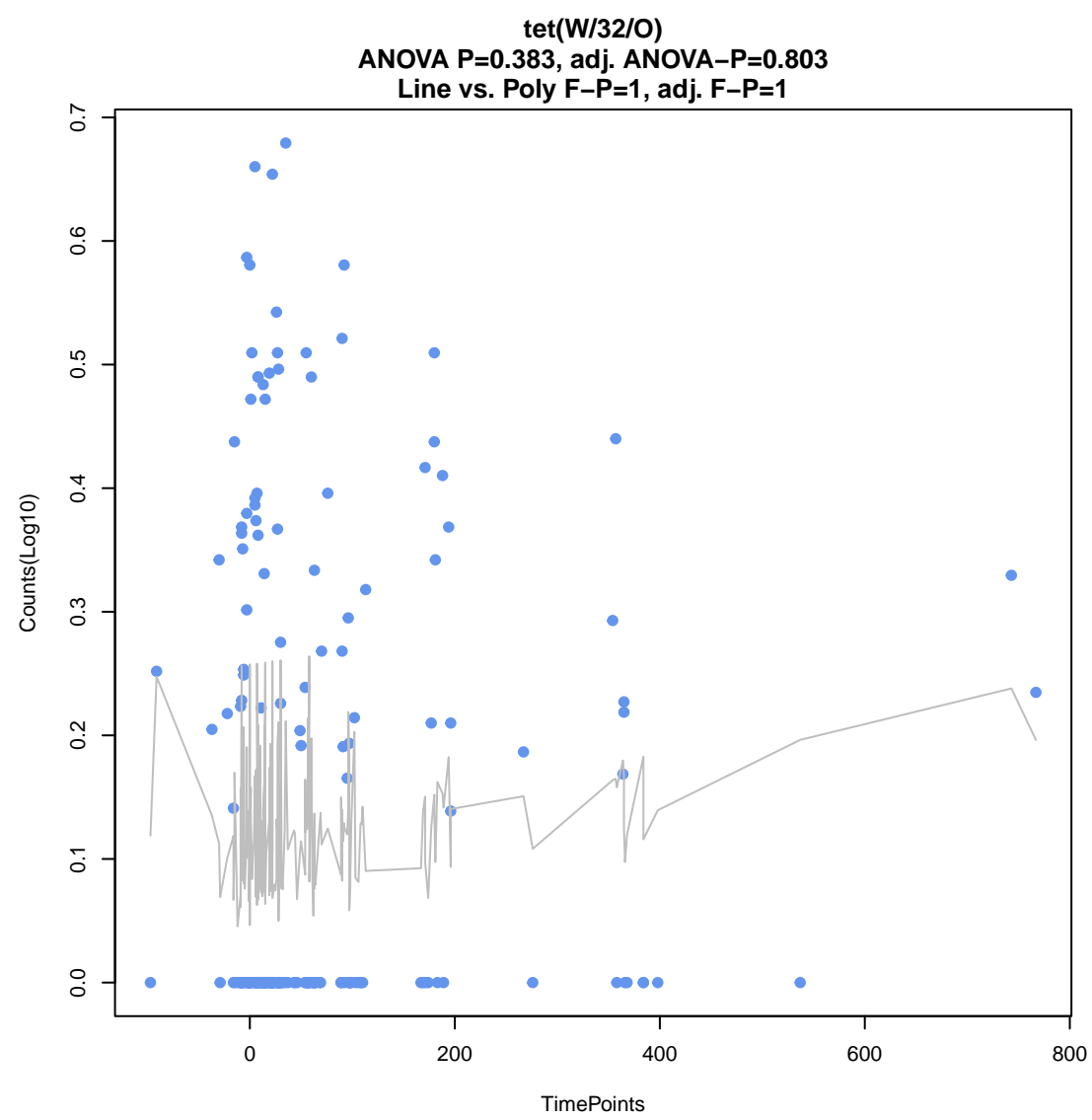
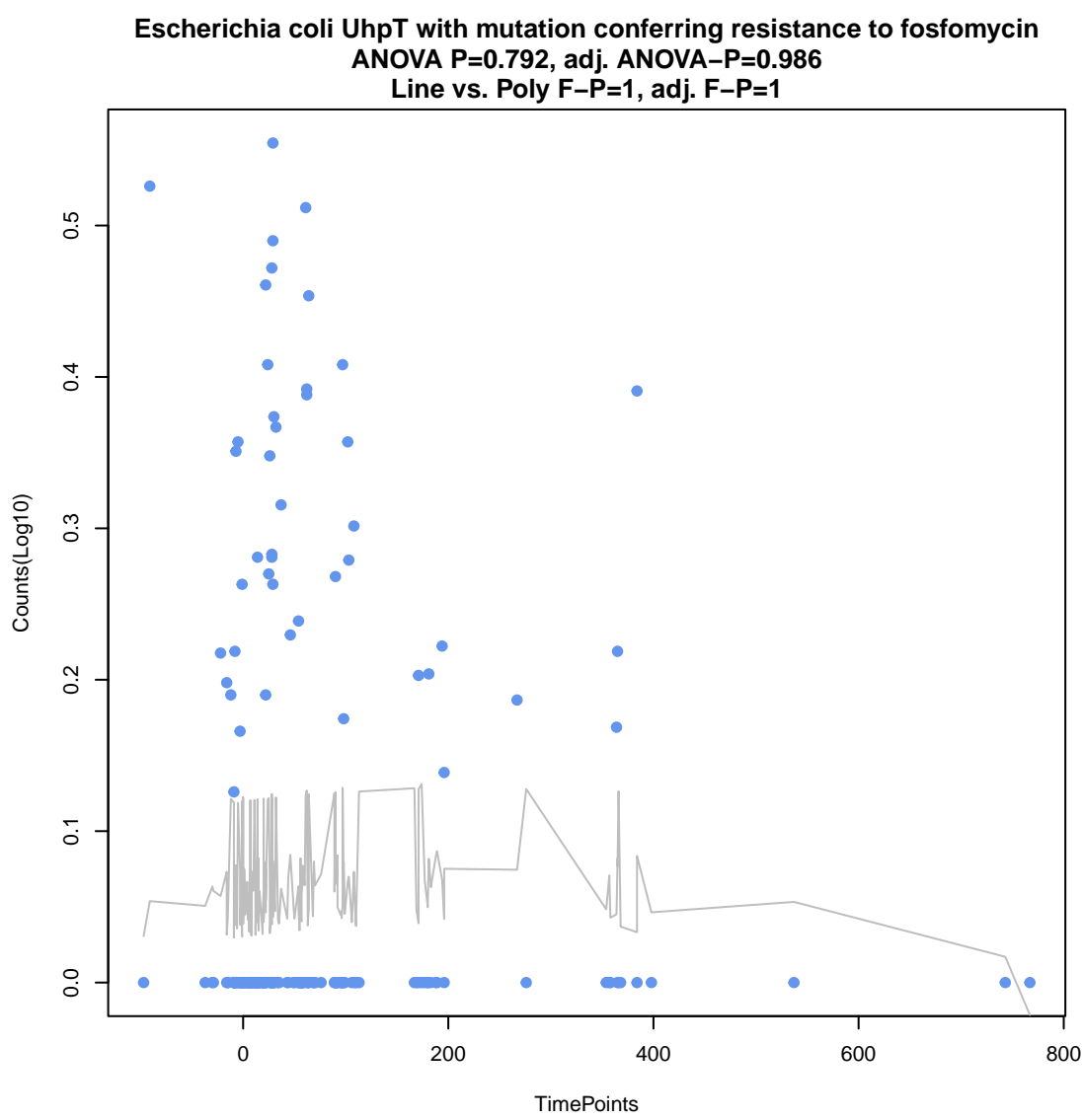
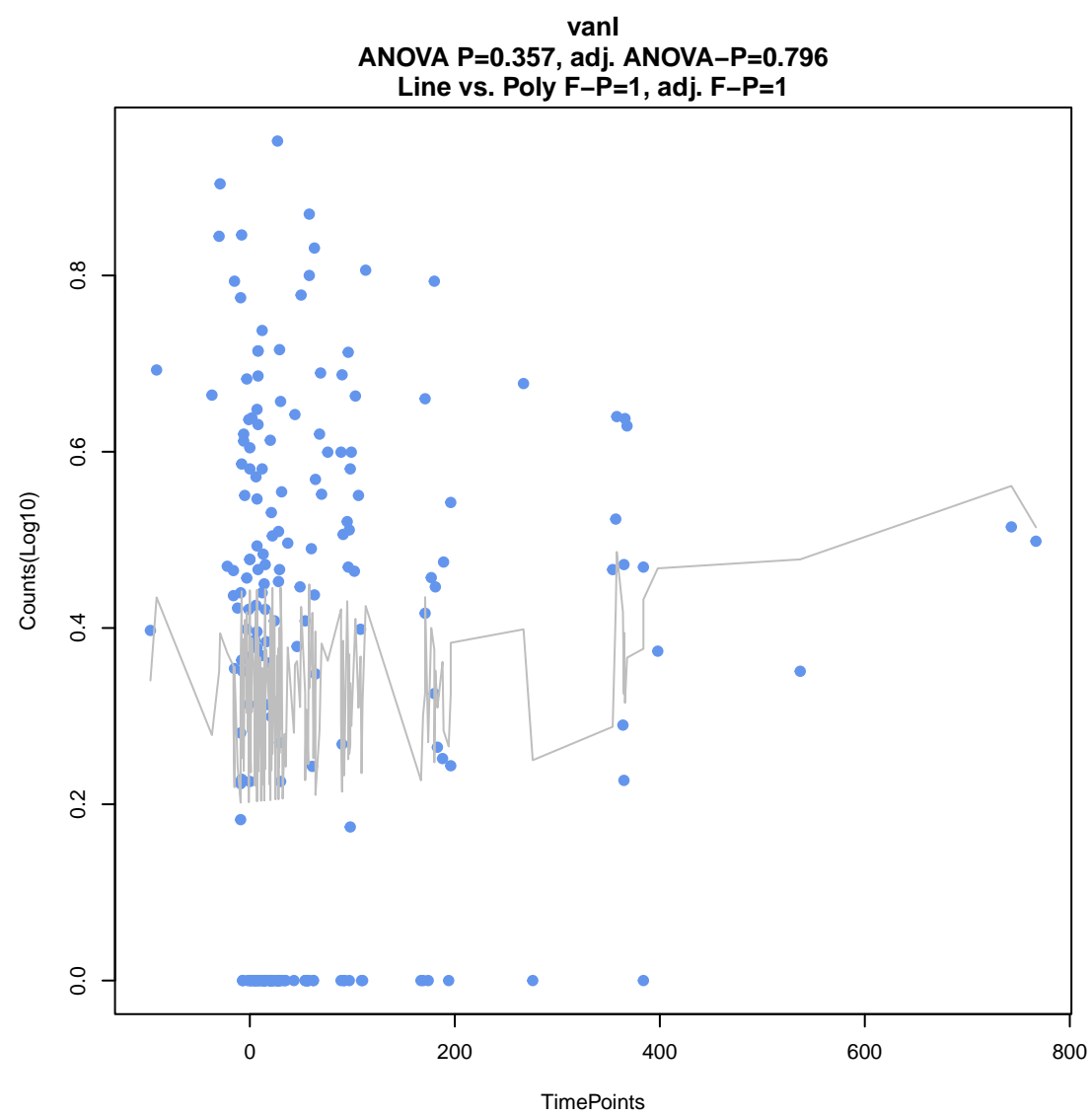
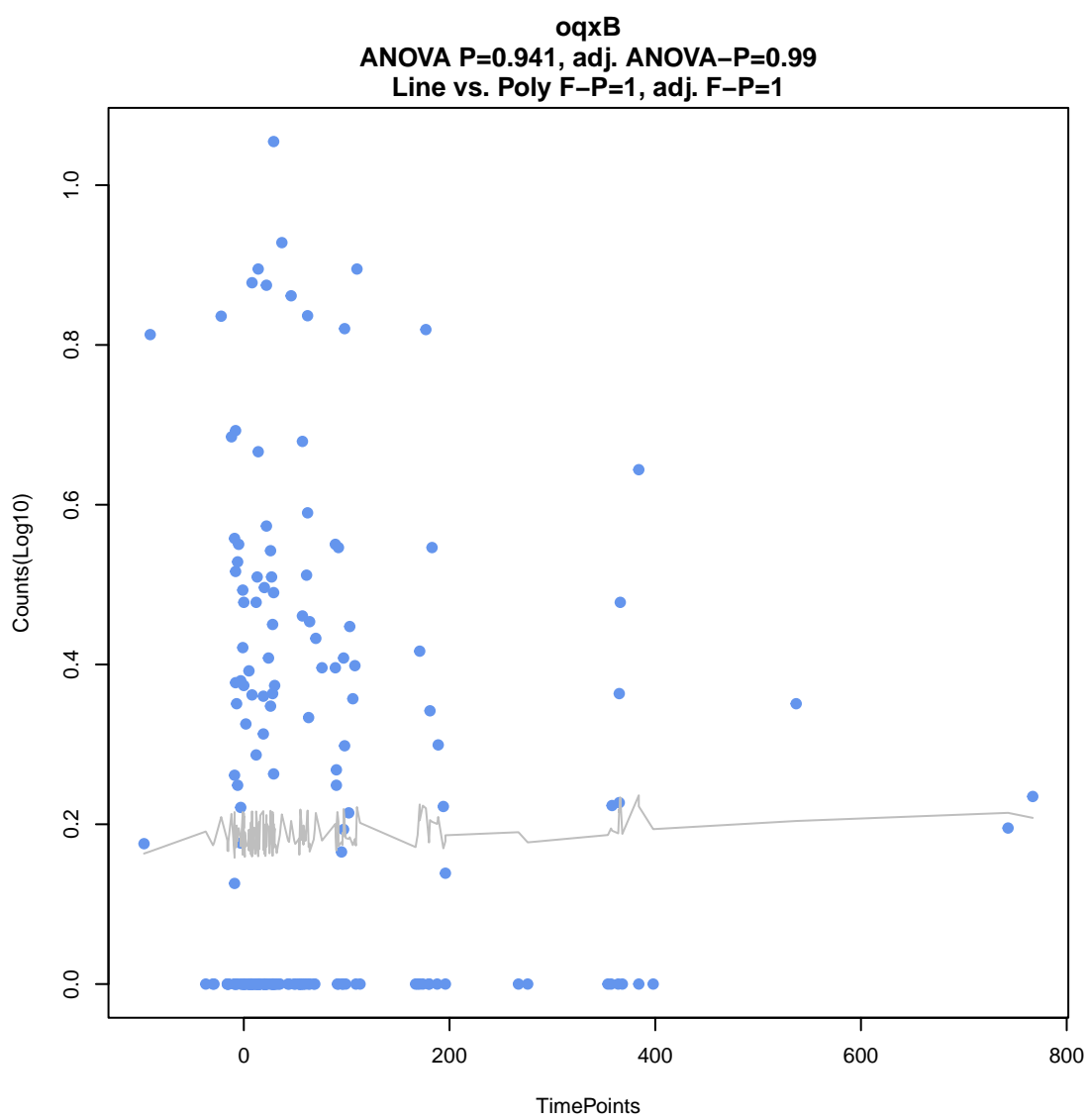
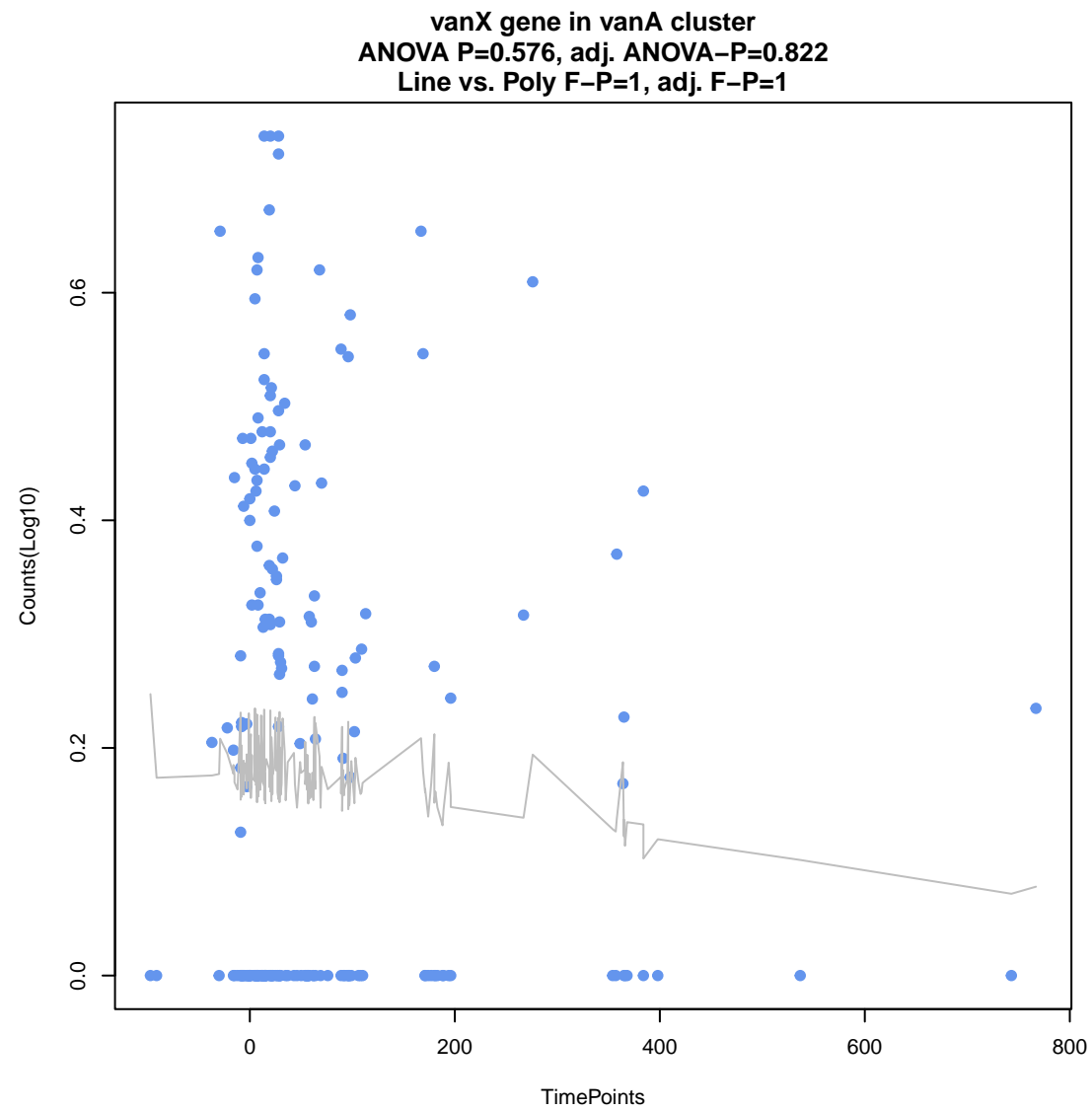
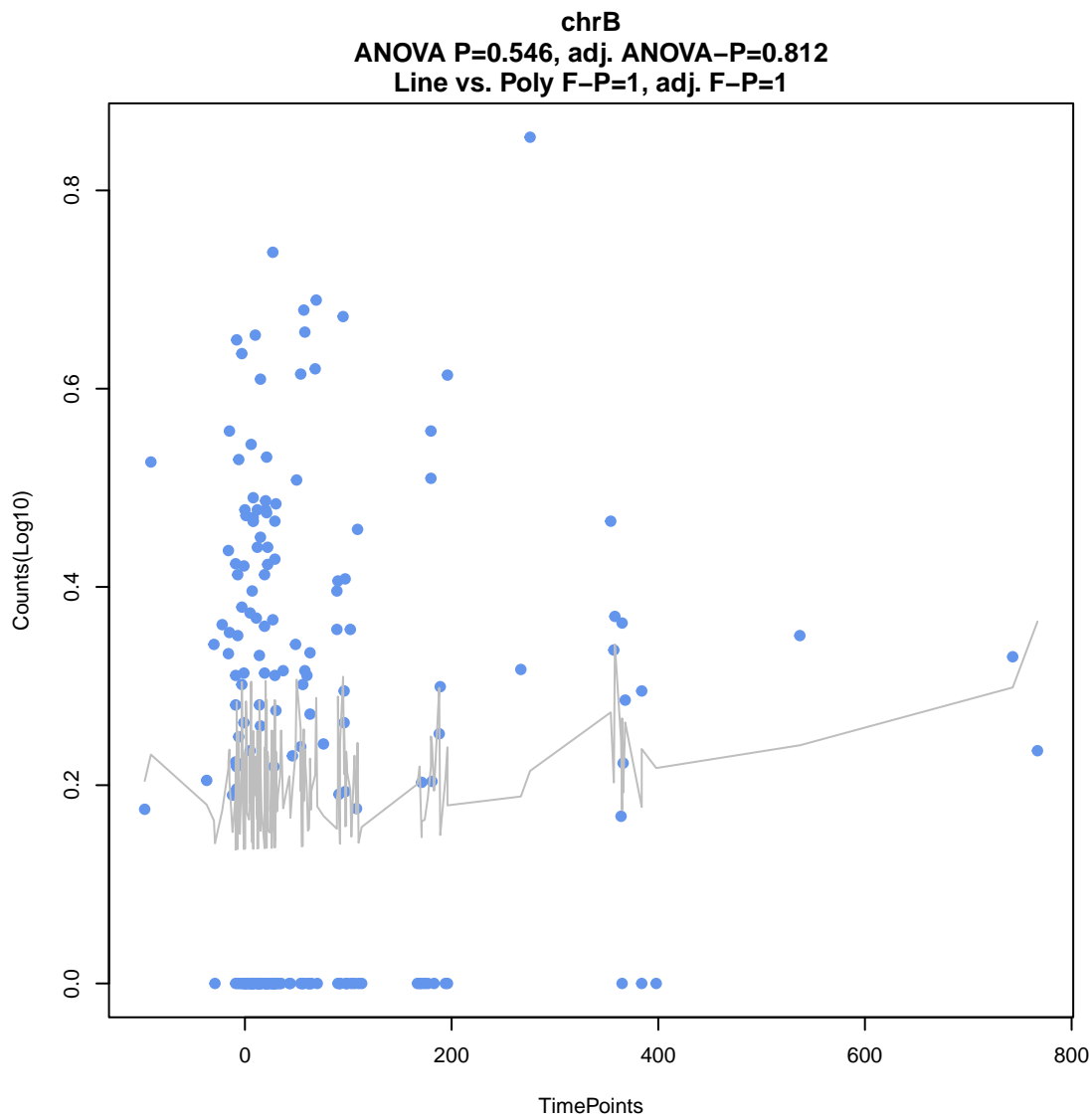


**tet(40)**  
ANOVA P=0.518, adj. ANOVA-P=0.803  
Line vs. Poly F-P=1, adj. F-P=1



**tetB(60)**  
ANOVA P=0.872, adj. ANOVA-P=0.99  
Line vs. Poly F-P=1, adj. F-P=1

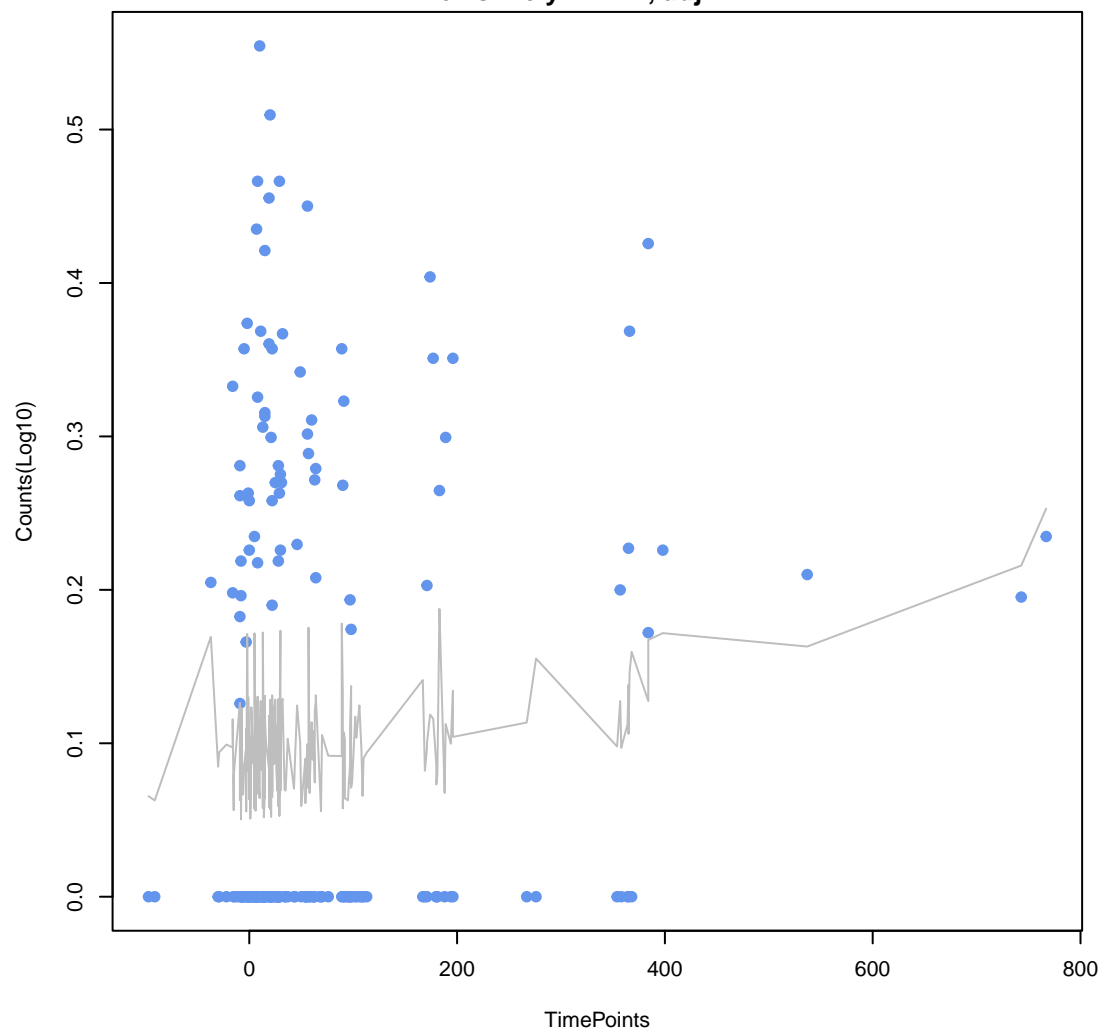






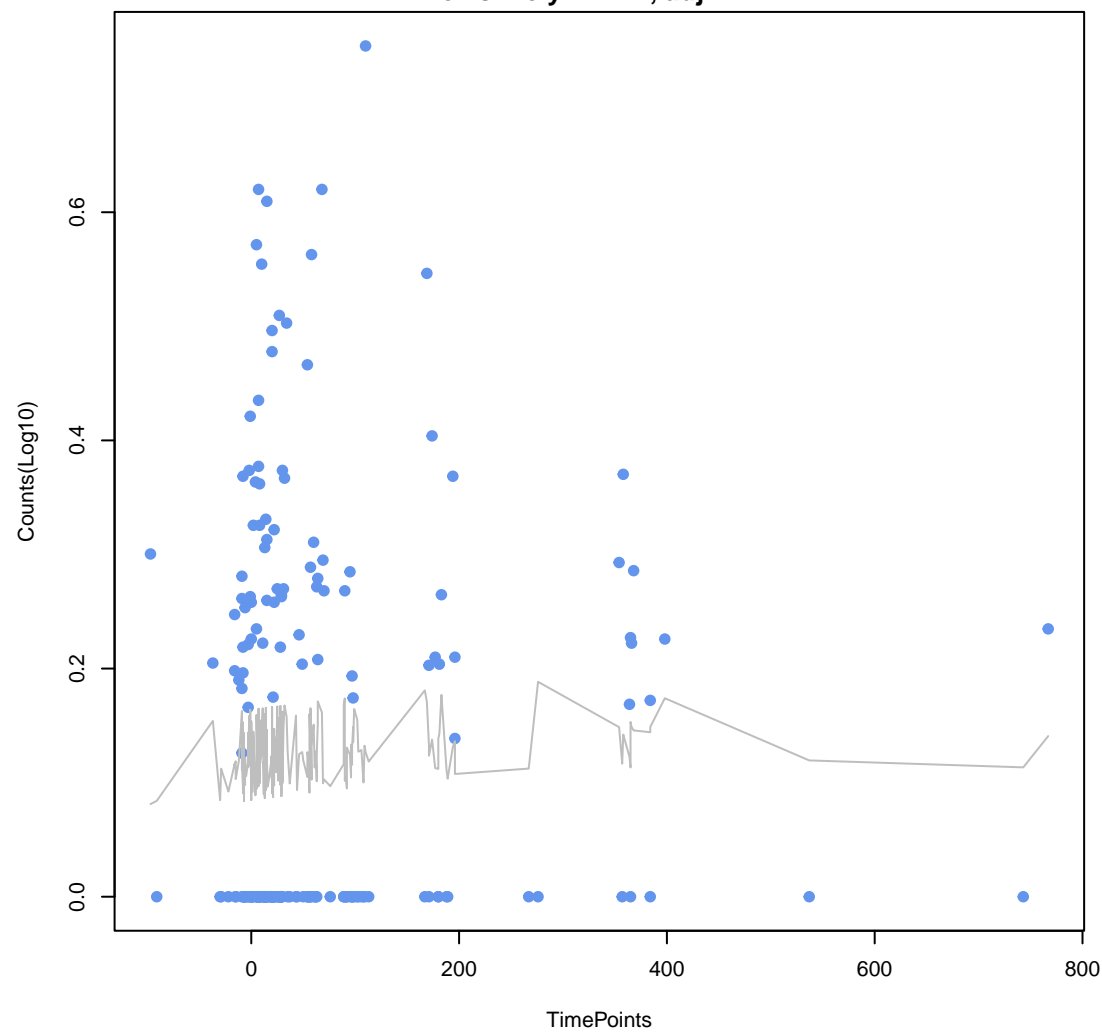
**gadX**

ANOVA P=0.254, adj. ANOVA-P=0.735  
Line vs. Poly F-P=1, adj. F-P=1

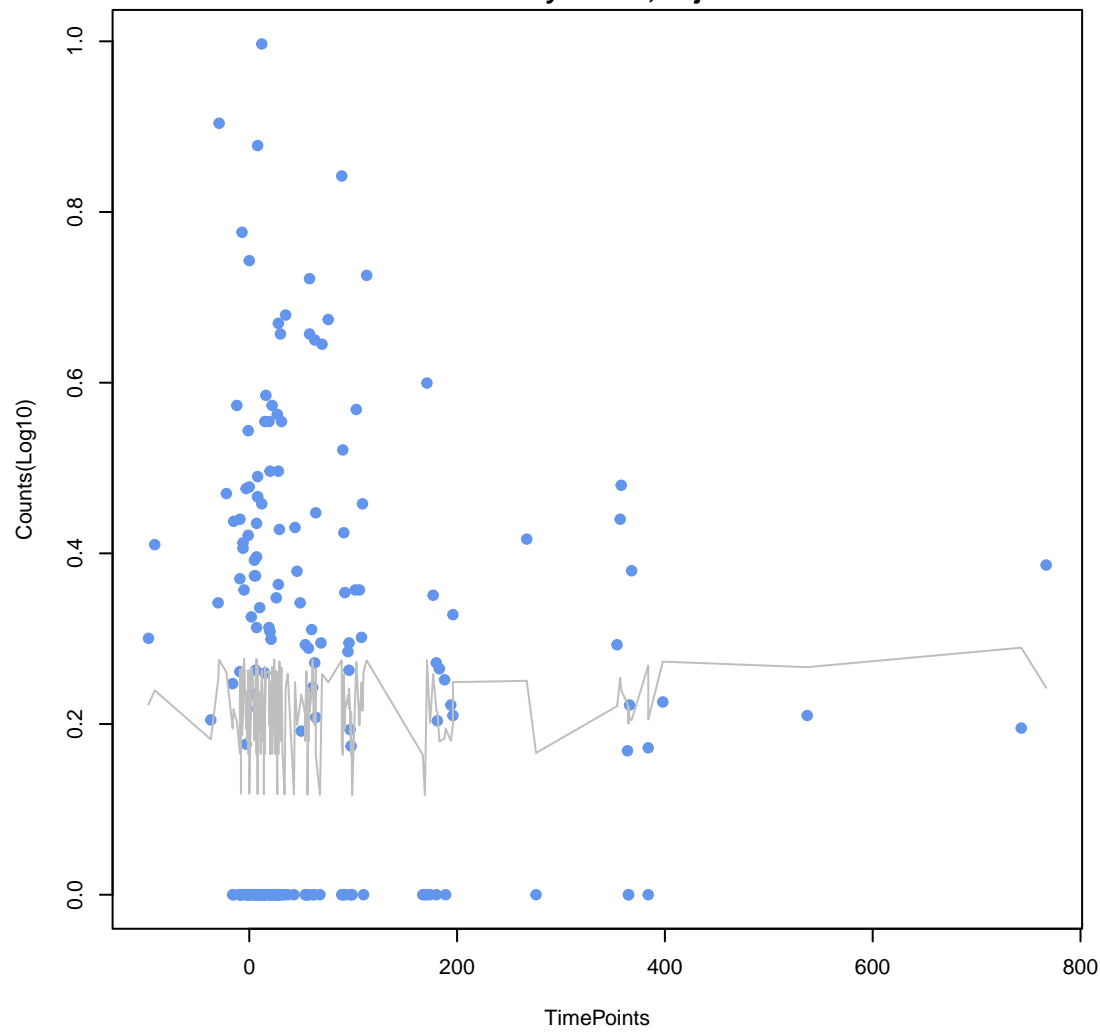


**AcrE**

ANOVA P=0.782, adj. ANOVA-P=0.986  
Line vs. Poly F-P=1, adj. F-P=1

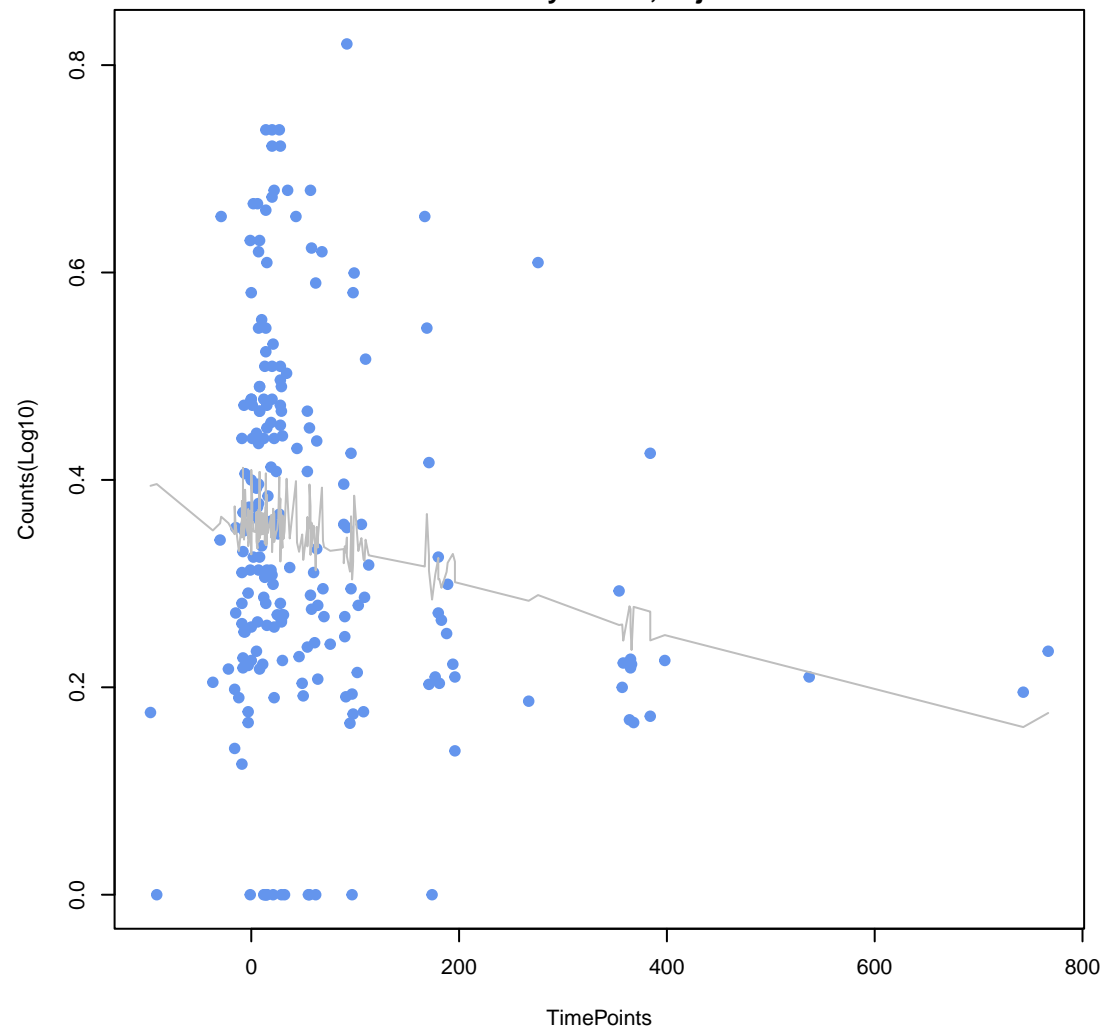


**vanR gene in vanD cluster**  
ANOVA P=0.966, adj. ANOVA-P=0.99  
Line vs. Poly F-P=1, adj. F-P=1



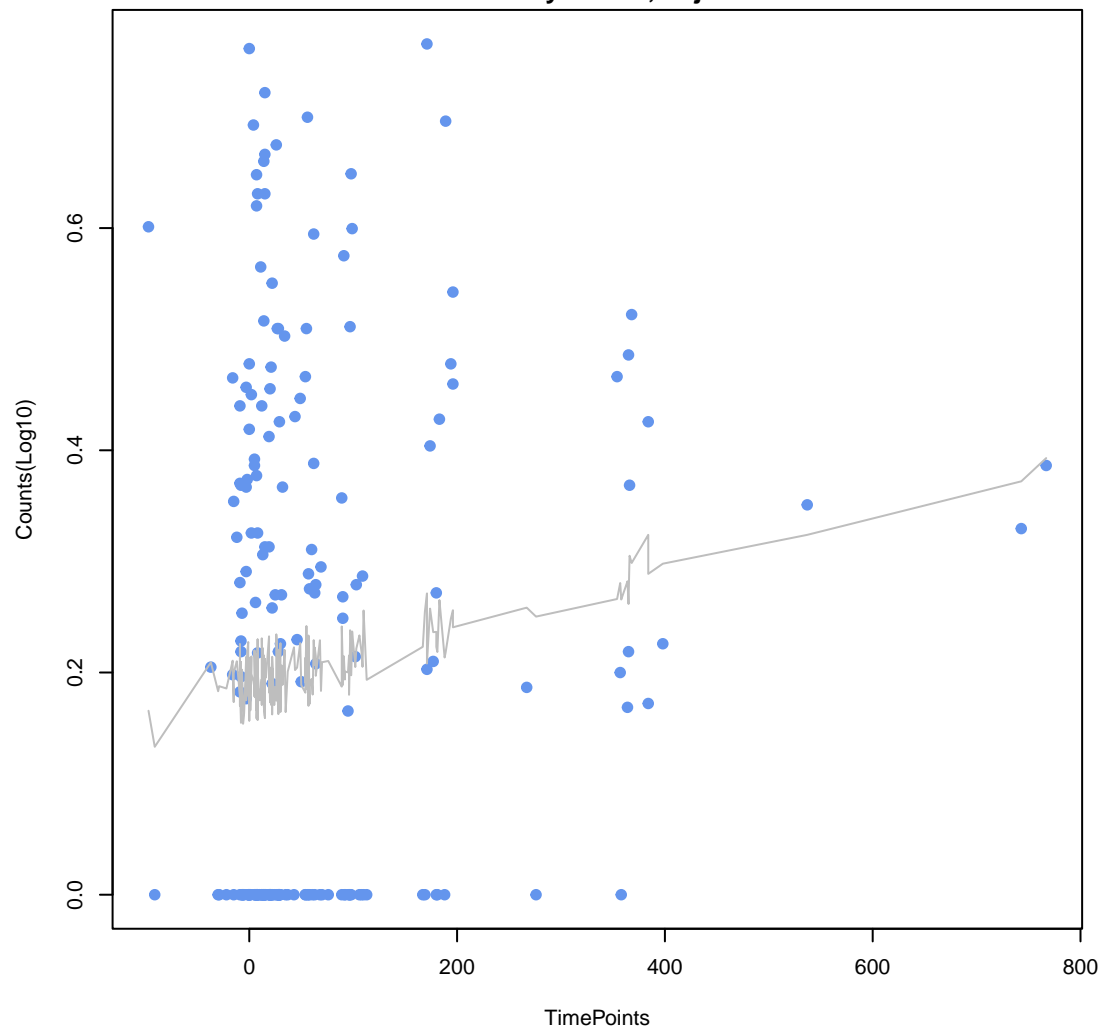
**ErmB**

ANOVA P=0.0468, adj. ANOVA-P=0.417  
Line vs. Poly F-P=1, adj. F-P=1



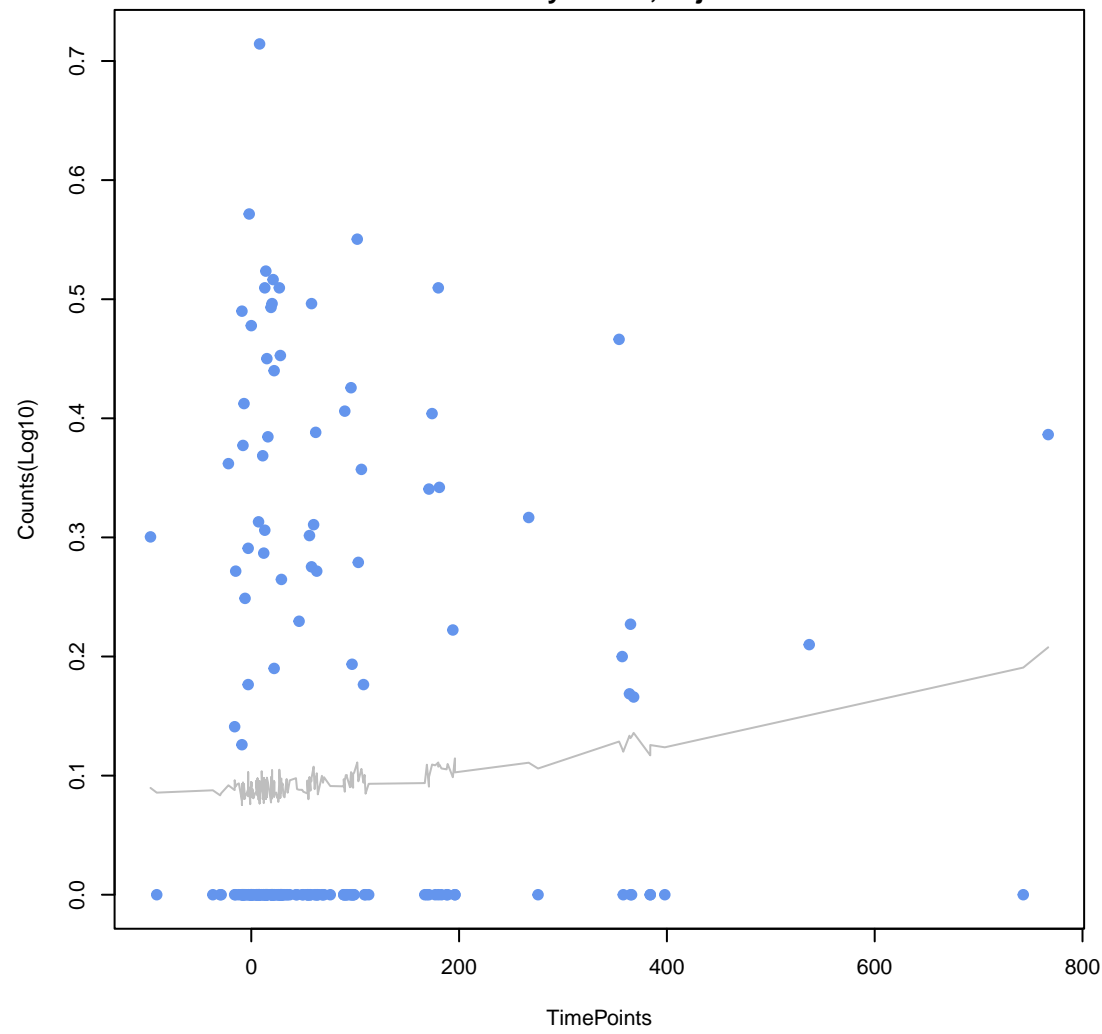
**mdtF**

ANOVA P=0.166, adj. ANOVA-P=0.614  
Line vs. Poly F-P=1, adj. F-P=1

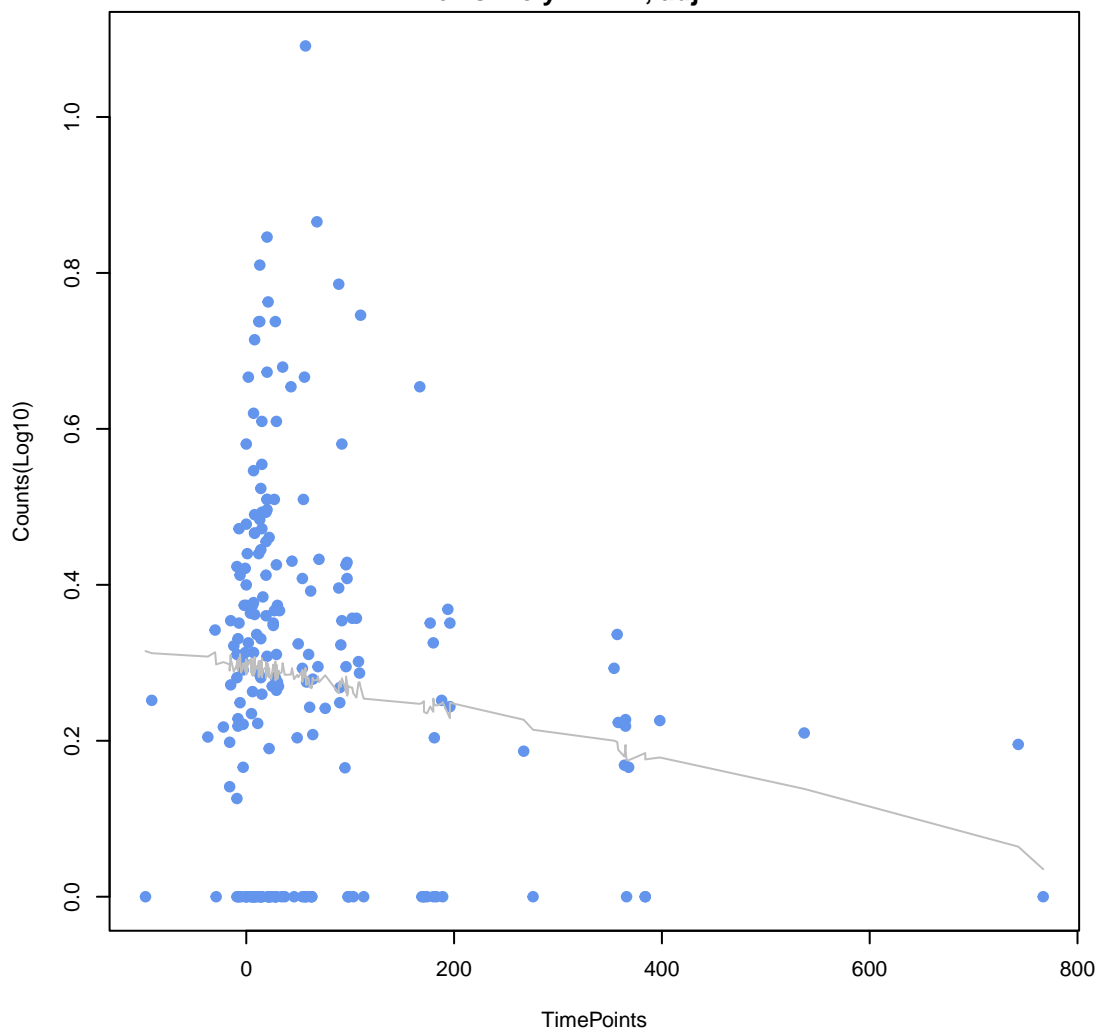


**tet(W/N/W)**

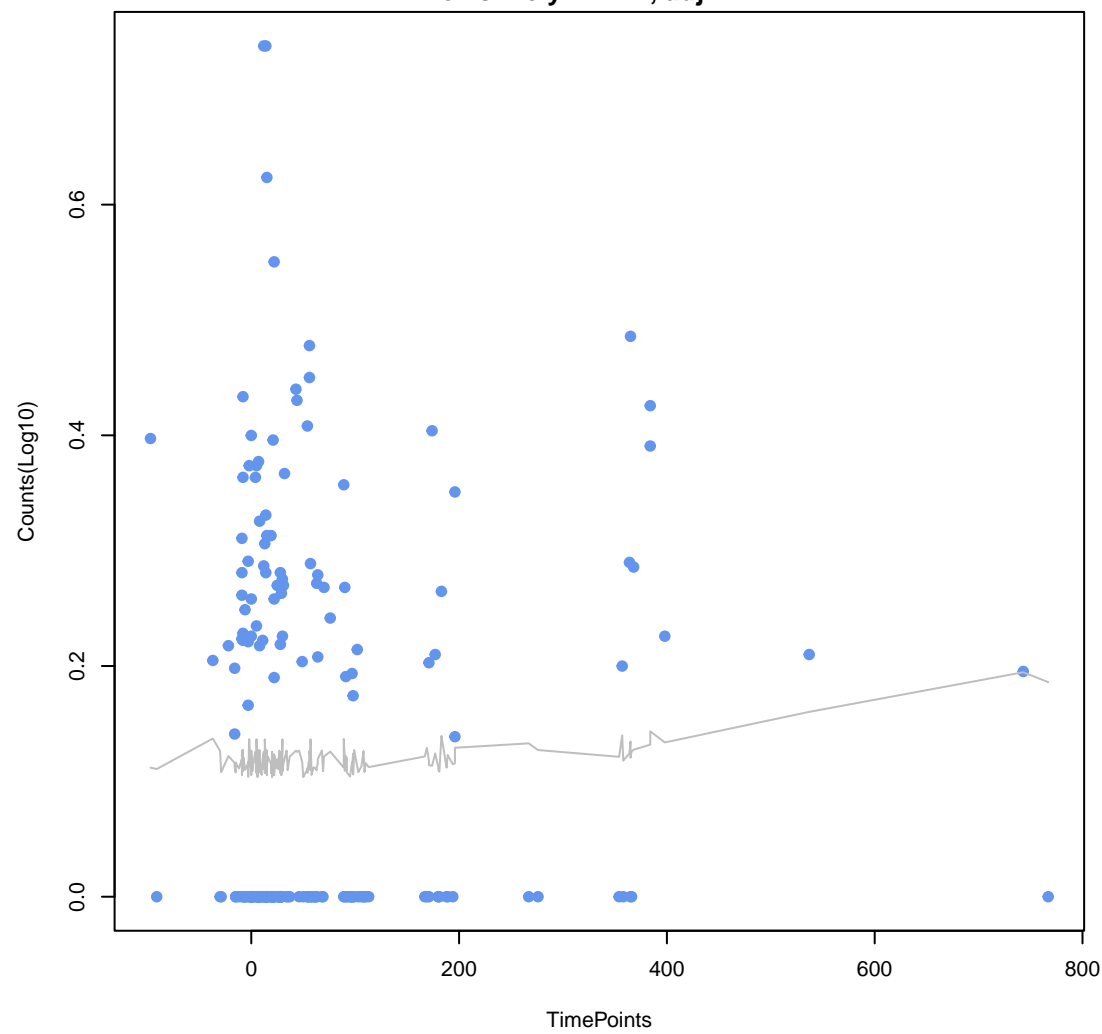
ANOVA P=0.483, adj. ANOVA-P=0.803  
Line vs. Poly F-P=1, adj. F-P=1



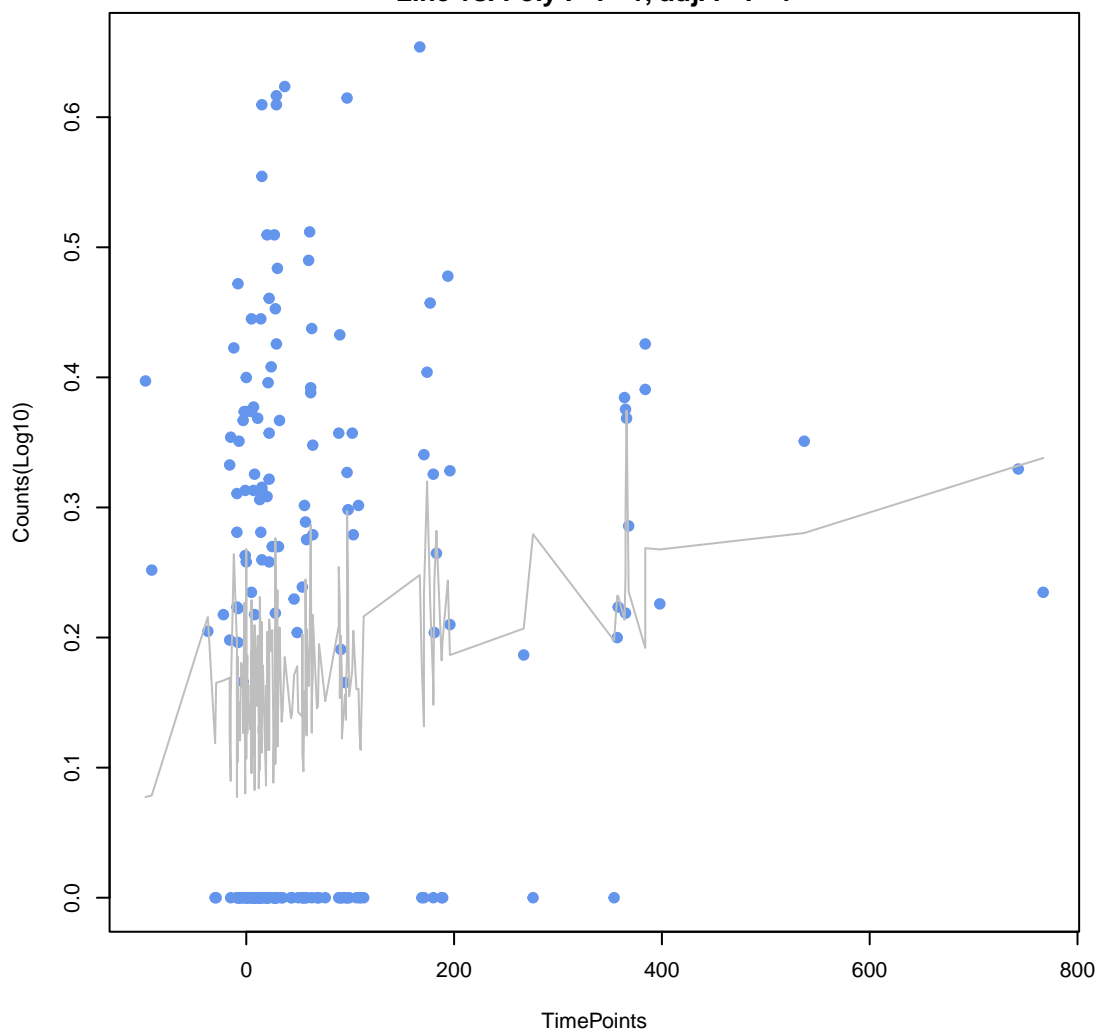
**ErmF**  
ANOVA P=0.0641, adj. ANOVA-P=0.432  
Line vs. Poly F-P=1, adj. F-P=1



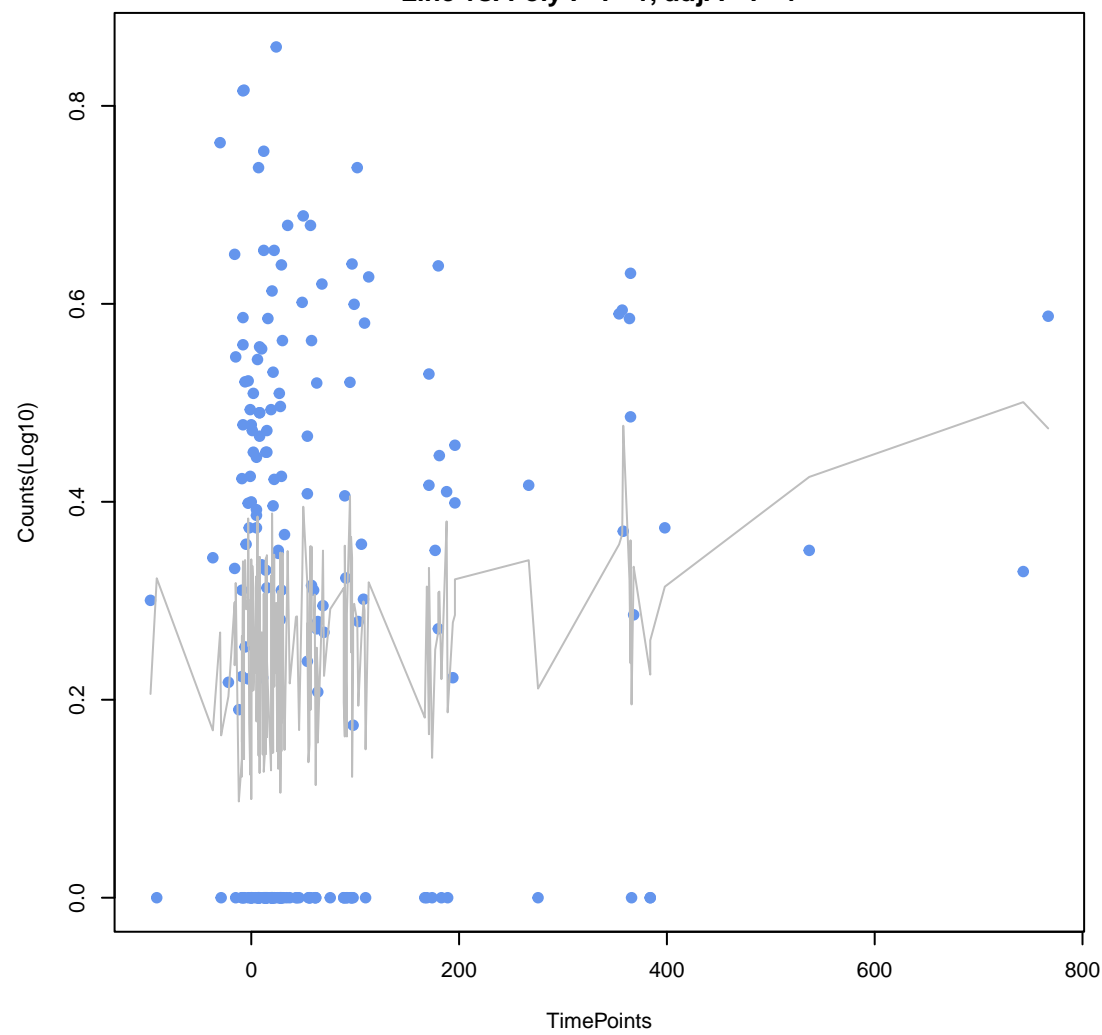
**mdtA**  
ANOVA P=0.785, adj. ANOVA-P=0.986  
Line vs. Poly F-P=1, adj. F-P=1



**bacA**  
ANOVA P=0.0288, adj. ANOVA-P=0.28  
Line vs. Poly F-P=1, adj. F-P=1



**ANA-1**  
ANOVA P=0.153, adj. ANOVA-P=0.583  
Line vs. Poly F-P=1, adj. F-P=1



**Klebsiella pneumoniae KpnH**  
ANOVA P=0.931, adj. ANOVA-P=0.99  
Line vs. Poly F-P=1, adj. F-P=1

